

1 NORTH SLOPE FEDERAL SUBSISTENCE REGIONAL
2
3 ADVISORY COUNCIL MEETING
4
5 PUBLIC MEETING
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8
9 VOLUME II
10

11
12 Barrow Inupiat Heritage Center
13 Barrow, Alaska
14 February 20, 2014
15 9:00 a.m.
16
17

18 COUNCIL MEMBERS PRESENT:
19

20 Harry Brower, Chair
21 Rosemary Ahtuanguaruak - Telephonic
22 Gordon Brower
23 James Nageak
24 Robert Shears
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29 Regional Council Coordinator, Eva Patton
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42 Recorded and transcribed by:
43

44 Computer Matrix Court Reporters, LLC
45 135 Christensen Drive, Suite 2
46 Anchorage, AK 99501
47 907-243-0668/sahile@gci.net
48

1 P R O C E E D I N G S
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3 (Barrow, Alaska - 2/20/2014)
4
5 (On record)
6
7 CHAIRMAN BROWER: We'll bring the
8 Council meeting back to order after the recess. Today
9 is February 26th -- no.
10
11 REPORTER: 20th.
12
13 CHAIRMAN BROWER: Is it 19 or 20, Tina?
14
15 REPORTER: The 20th.
16
17 MS. PATTON: 20.
18
19 CHAIRMAN BROWER: 20. Okay, thank you.
20 February 20. It's 9:21 by this clock. At this time
21 I'd like to call the meeting back to order. Again, we
22 have a listening audience and we have participants
23 through the teleconference. Maybe at this time I'd
24 like to have the folks on the teleconference to
25 introduce themselves so we can at least identify who is
26 all on this morning.
27
28 DR. FERGUSON: Yeah, this is Jayde
29 Ferguson. I'm with Alaska Fish and Game, the fish
30 pathology lab in Anchorage.
31
32 MS. INGLES: Good morning. I'm Palma
33 Ingles with OSM in Anchorage.
34
35 MS. AHTUANGARUAK: Rosemary
36 Ahtuanguaruak, Barrow.
37
38 MR. SHARP: Good morning. This is Dan
39 Sharp with Bureau of Land Management in Anchorage.
40
41 MR. BROOKS: Thank you, Mr. Chair.
42 Good morning everyone. This is Jeff Brooks in the
43 Office of Subsistence Management in Anchorage.
44
45 MS. OKADA: Good morning. This is
46 Marcy Okada with National Park Service in Fairbanks.
47
48 CHAIRMAN BROWER: I guess if that's
49 everyone, thank you for your introductions. I've heard
50 Katie, Rosemary, Palmer, Sam, Jeff, Marcy.

1 REPORTER: Dan.
2
3 CHAIRMAN BROWER: And Stan?
4
5 REPORTER: Dan.
6
7 CHAIRMAN BROWER: Stan?
8
9 REPORTER: Dan.
10
11 CHAIRMAN BROWER: S-T-A-N?
12
13 REPORTER: D-A-N.
14
15 CHAIRMAN BROWER: Dan, D-A-N. I'm
16 sorry. I heard Sam. My ears are ringing. I'm sorry
17 if I heard wrong. Dan, D-A-N. Okay. Thank you again.
18 We have our following agenda, but James Nageak (in
19 Inupiaq). I'm going to ask James to give an invocation
20 this morning. It's something that we practice here, so
21 I'll follow along with that.
22
23 (Invocation)
24
25 CHAIRMAN BROWER: Thank you, James.
26 Following our agenda this morning -- maybe before I do
27 that and maybe just for the benefit of the folks that
28 are on teleconference we can go through and introduce
29 ourselves as to who is present here.
30
31 We'll start with Bob.
32
33 MR. SHEARS: Good morning. Bob Shears.
34
35 MR. NAGEAK: James Nageak from
36 Anaktuvuk.
37
38 MR. G. BROWER: Gordon Brower, Barrow,
39 Alaska, Chipp River area.
40
41 CHAIRMAN BROWER: Thank you, Gordon.
42 Harry Brower from Barrow in Browerville.
43
44 (Laughter)
45
46 CHAIRMAN BROWER: Eva.
47
48 MS. PATTON: Good morning. Eva Patton,
49 Council coordinator, OSM.
50

1 MR. MATHEWS: Vince Mathews with
2 Arctic, Yukon Flats and Kanuti Refuges.
3
4 DR. JENKINS: Good morning. David
5 Jenkins with OSM.
6
7 DR. YOKEL: Good morning. Dave Yokel
8 with BLM.
9
10 PAT PETRIVELLI: Pat Petrivelli with
11 BIA, Anchorage.
12
13 MR. LASSUY: Denny Lassuy, North Slope
14 Science Initiative.
15
16 MR. SCANLON: Brendan Scanlon, Alaska
17 Department of Fish and Game, Sport Fish Division.
18
19 MR. LEAVITT: Isaac Leavitt, North
20 Slope Borough, Department of Wildlife.
21
22 MR. ADAMS: Good morning. Billy Adams,
23 North Slope Borough, Wildlife Department.
24
25 CHAIRMAN BROWER: Thank you, Billy.
26 Thank you, everyone. I thank you all for taking your
27 time and spending it with us here with the North Slope
28 Regional Advisory Council meeting. We did hear from
29 Denny during the evening yesterday regarding the North
30 Slope Science Initiative. We'll start with -- is it
31 Brandon?
32
33 MS. PATTON: Mr. Chair. This morning
34 the first presentation we have is from Jayde Ferguson
35 on the whitefish pathology and he's online.
36
37 CHAIRMAN BROWER: All right. Yeah, I'm
38 just looking too far up on top of the agenda. The
39 written information here is Thursday 9:00 a.m., Floyd
40 Hoyt fish pathology report for Nuiqsut.
41
42 MR. G. BROWER: Is that new business?
43
44 CHAIRMAN BROWER: That's under our part
45 of the report in regard to fisheries. The name again?
46
47 MS. PATTON: Jayde Ferguson.
48
49 CHAIRMAN BROWER: Jayde Ferguson.
50

1 MS. PATTON: From the ADF&G fish
2 pathology lab.
3
4 CHAIRMAN BROWER: Okay. Jayde, are you
5 on?
6
7 DR. FERGUSON: Yes, sir.
8
9 CHAIRMAN BROWER: So I'll give you the
10 floor to provide your presentation.
11
12 DR. FERGUSON: Okay. Thank you. I
13 hope everybody can hear me all right. I'm Jayde
14 Ferguson with Fish and Game, the fish pathology lab.
15 I'm the fish pathologist. I'm just going to go over an
16 overview regarding a diagnostic case involving broad
17 whitefish from Nuiqsut area that we had sent out a
18 little while ago. I've provided a copy of this
19 overview to the Council and other folks there in
20 Barrow. I'll just start with a background here. We'd
21 received reports about broad whitefish from the
22 Colville River having a patchy fungal-like mass on
23 their exterior. There's no known estimate on the
24 number of fish that were affected in the catch and
25 there was no summary of reported observations that was
26 provided.
27
28 The first confirmed report was from
29 fish caught on October 12th, 2013 and there were three
30 fish that were submitted to the North Slope Borough.
31 Subsequently our lab received five fresh and partially
32 frozen fish that were caught on the 15th of October and
33 also fixed tissues from six fish that were caught on
34 the 18th of that month. There was no mortality
35 reported. These affected fish were found in gillnets
36 along with apparently healthy fish.
37
38 There was some concern that radiation
39 from the Japanese disaster could be involved, so the
40 North Slope biologist measured ionizing radiation in
41 fish with a Geiger-Mueller counter and found that there
42 was no elevated levels there.
43
44 So our lab performed a necropsy. What
45 we found was all the fish appeared to be in spawning or
46 post-spawning condition. Some of the females had egg
47 reabsorption, meaning the eggs that didn't spawn were
48 breaking down and being reabsorbed in the body. The
49 lesion was characterized as being small to large, brown
50 to greenish cottony fungal growth on the exterior,

1 mostly the head and snout region. For you folks that
2 have a copy of the overview, you can see in the picture
3 that I provided what that looked like.

4
5 Some of the lesions had a reddened area
6 and the skin appeared to be ulcerated. Looking more
7 closely at it under a microscope, we found fungal-like
8 material that was branched, had no divisions and had a
9 club spore forming structure and this corresponds with
10 Saprolegnia, which is a common water mold. We also saw
11 some diatoms, which are a single cell plant made out of
12 glass-like material and some bacteria.

13
14 There were no net marks -- or there
15 were -- sorry, there were net marks on several fish.
16 There was no food in the GI track and there was no fat
17 or very little fat internally, but other than that they
18 looked normal internally.

19
20 Then we performed some specific tests
21 looking for infections. We did bacteriology, which is
22 a way of detecting bacteria and it detects any type of
23 bacteria. It's not specific for any one type. We
24 tested two fish. We used kidney tissue because that's
25 a blood-filtering organ that's good to look out for an
26 internal infection. What we found was a negative
27 result.

28
29 We also performed a test called a
30 fluorescent antibody test. This looks for specific
31 bacteria of interest. The three bacteria we were
32 interested in are common pathogens in Alaska and these
33 are *Aeromonas salmonicida*, *Yersinia ruckeri* Types I and
34 II. I won't go into detail of how the test worked, but
35 just basically a probe fluoresces if the bacteria is
36 present when kidney was tested and the result was
37 negative.

38
39 We also performed mycology to grow the
40 fungal-like material and to identify it. This again
41 can detect many different types of fungus, not
42 specific. The external lesions that were tested of the
43 six fish, half of those fungus grew on our test and all
44 of them appeared to have the same type of growth. This
45 is characterized as a large amount of white cottony
46 growth that was branched rarely with divisions and
47 produced a few spore-forming structures. This again
48 corresponded to *Saprolegnia*, a water mold.

49
50 I also performed histopathology. This

1 is a way of looking at tissues under a microscope to
2 determine what's changed in the tissue of diseased
3 animals. I found a lot of post-mortem decomposition.
4 All the internal organs appeared to be normal and the
5 skin lesions contained fungal-like material that was
6 branched and, again, all the same features that are
7 consistent with Saprolegnia. I saw a few diatoms and
8 bacteria as well.

9
10 And the last test we performed was
11 virology and this is a way of testing for viruses. We
12 used three different cell lines to allow to test for
13 many different test viruses and one fish was tested we
14 used kidney and spleen and I have on here that it's in
15 progress, but as of yesterday this test was finalized.
16 I'm happy to report that this was also a negative
17 result on this test.

18
19 So, in conclusion, the lesion was
20 caused by a common water mold called Saprolegnia.
21 There are no other pathogens associated with the
22 lesion. This is not an exotic organism to the North
23 Slope and surrounding area. Our earliest record is
24 from Barrow, Alaska in 1980 from a whitefish and this
25 dates back to when our lab was created and started
26 testing fish. Other locations include Noatak, Wulik
27 River, Kotzebue, Selawik, Nome, Elim and Koyukuk and
28 these all involved salmonids.

29
30 Saprolegnia is generally regarded as an
31 opportunistic pathogen because it's ever present in the
32 environment and it is a Saprophyte that's important for
33 decomposing material in the environment; however, it
34 can act as a pathogen particularly in stressed fish
35 because their immune system is depressed. Some common
36 stressors for fish becoming infected with Saprolegnia
37 would include sexual maturation. This actually causes
38 a physiological change in the skin and the mucus of the
39 fish. Any sort of physical activity that occurs on the
40 spawning beds, trauma from predation and fishing gear,
41 changes in water quality and temperature, other
42 pathogens and parasites and pollution can all be
43 important stressors and basically anything that could
44 compromise the mucus slime coat of the fish.

45
46 So, in this case, fish were in spawning
47 condition and had evidence of physical trauma marks.
48 These are known causes for this infection. Water
49 quality data is lacking in this river, so it's
50 difficult to speculate there on what could be applied.

1 There was concern about pollution, so water samples
2 were sent to a lab in Oregon and they came back
3 negative for metals and hydrocarbons.

4
5 So there's a growing concern that this
6 mold is exotic, which it's not, and that it could lead
7 to a food shortage at a subsistence level and it's
8 increased occurrence could be due to climate change,
9 industrial development or other anthropogenic
10 activities. So, in order to try and answer some of
11 those questions, a very large interdisciplinary project
12 would need to be instituted and this would require some
13 baseline data and some long-term monitoring.

14
15 Some water quality measurements that
16 would be important to look at here would be organic
17 road because Saprolegnia grows on organic material. So
18 things like total organic carbon or TOC could be looked
19 at as well as BOD, which is biochemical oxygen demand,
20 things like nitrite and ammonia could be measured as
21 well because those would be important stressors to
22 fish. Water flow could be important because of
23 decreased water flow would potentially allow more
24 contact with the fish and the mold. Dissolved oxygen,
25 again that would be a stress factor if there's low DO.

26
27
28 And temperature. For temperature,
29 Saprolegnia actually grows at a pretty broad range of
30 temperatures, anywhere from about 3 degrees to 33
31 degrees Celsius. I did find a report that had an
32 optimal growth of about 22 to 28 degrees Celsius and
33 that was an isolate from British Columbia. So it's
34 likely that temperature -- the importance of
35 temperature as a stressor of fish, so any temperature
36 that would be out of the optimal range of the fish, if
37 it's too high, it could create stress, if it's too low,
38 the fish immune system actually slows down and it could
39 be infected more easily.

40
41 I couldn't find a whole lot of
42 information on broad whitefish what their temperature
43 optimum range is, but I did find for European whitefish
44 they had an optimum range of 8 to 15 degrees Celsius
45 and a lethal threshold or stressful threshold of about
46 20 to 25 Celsius. It's also important to point out
47 that fish would seek out refugia, which is basically
48 they would find areas in the watershed that would be
49 cooler if that's optimum habitat for them to be in.

50

1 One other thing to consider here would
2 be that it's important to try and separate out spawning
3 as the cause versus water quality. So we may be
4 looking at juveniles or immature fish or different time
5 of year might be a way to try and separate that out.
6 Then just to give us a starting point, a suggestion
7 would be to conduct a systematic recording of how many
8 fish are affected in the catch, have an established
9 reporting system with the same methods and a way of
10 confirming it's presence. So one idea would be a form
11 could be created and filled out for each catch and then
12 if the lesion is present, it could be photographed and
13 sent to North Slope biologists for confirmation.

14
15 Then just real briefly before I open it
16 up to any questions I wanted to touch on just for a
17 minute a totally unrelated fungal case that is of
18 interest to our lab because there's not a lot known
19 about it and it's distinctly different from the
20 Saprolegnia in that it's very black and large, so it
21 looks quite different. As I mentioned before, there's
22 not a lot known. With Saprolegnia, that's pretty well
23 studied. It's probably been looked at or researched
24 for the last 100 to 150 years, but there's not a lot
25 out in the literature on this black fungus.

26
27 We've received reports of this
28 occurring in Saffron cod and we've actually received
29 Saffron cod and studied some material and they all come
30 from the Norton Sound area since 2005, is when the
31 reports started, and that would include Unalakleet,
32 Nome, Snake River and most recently the Shaktoolik
33 River. So far we've isolated three species of fungus
34 that all belong to the same group of fungus. As I
35 mentioned before, it has a large black lesion and those
36 that have a copy of the overview can see what it looks
37 like there.

38
39 Internally the fish appear to be
40 completely normal. The lesion is just contained to the
41 outside of the fish. There's just not a lot known
42 about transmission or anything else, so we're wanting
43 to get a better idea of what's going on there. So if
44 folks do come across this, they could contact our lab.
45 The best would be to try and get a photograph and that
46 way we could see if it looks like it's actually the
47 black fungus of interest here and then it would be good
48 to send it in if it's warranted.

49
50 I've listed my phone number there.

1 It's 267-2394 as well as my email address, which is
2 jayde.ferguson@alaska.gov and, again, photos would be
3 very helpful in determining if it should be sent in.
4 We would actually need fresh material, not frozen,
5 which I understand can be difficult, but Fish & Game is
6 actually willing to pay for the shipping costs if we
7 could get some good material to study.

8

9 So, with that, I'll open up to any
10 questions.

11

12 CHAIRMAN BROWER: Any questions to
13 Jayde.

14

15 MR. SHEARS: Mr. Chair.

16

17 CHAIRMAN BROWER: Robert.

18

19 MR. SHEARS: Good morning, Jayde. Bob
20 Shears from Wainwright. A good presentation. We've
21 also heard some similar information from Raphaela, our
22 expert scientist at Wildlife Department, and others,
23 but this broke it down even further. I'm curious about
24 Saprolegnia. The mold spores, how long can they exist
25 in the environment in a frozen state and still be able
26 to propagate when brought back into a thawed condition?

27

28 DR. FERGUSON: You know, I don't know
29 the exact amount of time. I mean I guess what I would
30 say is that in the aquatic environment they're not
31 going to be completely frozen, you know, down in their
32 substrate in the water column and whatnot. Once they
33 come outside of the water, you know, in the air they
34 could freeze and until -- I'm not real sure how long
35 they're viable after that, but certainly within the
36 environment that the fish are in and that water media
37 that they're swimming in they would be viable because
38 they wouldn't be frozen.

39

40 MR. SHEARS: Yeah, exactly. What I'm
41 noticing in Wainwright over the last decade is the
42 water coming -- the water condition in the tributaries
43 upstream around the places where we subsist, there's
44 always a light brown color. It had a lot of dissolved
45 carbon in it. Tundra Tea they called it. It was
46 completely edible, no problem with that, but since the
47 accelerated warming we're seeing an active layer just
48 above the permafrost digging into the ground. You
49 know, you used to be able to -- you know, in late
50 August you used to be able to dig down about 12 inches

1 before you hit the permafrost layer. Now you can dig
2 down three feet.

3
4 This area that formerly used to be
5 permanently frozen is now in the active zone and it's
6 dissolving incredible amounts of material into the
7 water. There are little feeder streams and tributaries
8 far up the rivers. You can't call it Tundra Tea
9 anymore. It's more like tundra espresso. You can't
10 even see through it.

11
12 There's a lot of dissolved material
13 that's coming out of the tundra that hasn't been
14 dissolved for centuries. I'm just wondering.....

15
16 DR. FERGUSON: Yeah, that's a lot of
17 material that things could feed off of, including the
18 mold.

19
20 MR. SHEARS: Exactly. You can smell it
21 and it's fresh smelling, you know, a fresh-smelling rot
22 like wet hay. I'm just curious if new pathogens or new
23 organisms are being introduced into the environment
24 that the fish haven't seen or had to respond to
25 genetically for thousands of years. Is there any way
26 to look at this Saprolegnia to develop a DNA
27 fingerprint of it to compare against.....

28
29 DR. FERGUSON: Actually there was a DNA
30 test run on this. It wasn't by our lab. I guess I
31 forgot to mention that. It came back as being, you
32 know, genetically the same as every isolate that's been
33 tested from fish across the world basically. It is
34 pretty well distributed mold. It's quite common in all
35 kinds of environments, so I don't think that new
36 pathogens are coming in through that frozen material
37 thawing out and feeding into the rivers. What could
38 happen is, you know, it's releasing a lot more
39 nutrients that anything that's present might, you know,
40 reproduce and grow more quickly, but I don't see how
41 anything new could come out of the earth in that
42 location.

43
44 MR. SHEARS: Okay. Thank you. That's
45 all I had, Mr. Chair.

46
47 CHAIRMAN BROWER: Thank you, Robert.
48 Gordon.

49
50 MR. G. BROWER: Mr. Chairman, Gordon

1 Brower for the record. You know, I fish quite a bit
2 for our community with these species of broad whitefish
3 and used to fish quite a bit for tomcods along our
4 beaches here, but that hasn't been available for maybe
5 20 years it seems like for the tomcods along our beach.
6 We have to go towards (indiscernible) to do that
7 nowadays. But my concern is about the mold itself. It
8 looks like there was some case of that in the 1980s,
9 somewhere around there, and then now we've got this in
10 the Colville River area. Is this particular mold found
11 in the lakes? Is it prevalent in lakes up here in the
12 arctic?

13

14 The same type of concern that Mr.
15 Shears just expressed about active layers of the tundra
16 increasing, making lakes more susceptible to drain even
17 these lakes that are not suitable for drinking water.
18 There's some lakes in my area at my camp that I don't
19 use for drinking water because you're going to get sick
20 from those. It's not a good lake, but there are other
21 lakes that we look at that we differentiate those lakes
22 as a water source for our camps. I'm wondering if
23 those have an impact.

24

25 The other concern I have is
26 transmission. Let's say an ice road was being built
27 across several rivers during the peak winter season.
28 The industry likes to pick lakes that don't have fish
29 because there's less regulatory -- you don't have to
30 adhere to as much regulatory requirements, but if
31 there's a lake with fish you're going to do a lot more
32 different things. Measurements, pH levels and discover
33 the life sustainability of that lake and the amount
34 that you can withdraw to protect that life
35 sustainability. You don't have to really do that with a
36 lake that has no fish in it. I'm wondering if there
37 was selecting the primary use for ice roads could be
38 transmitting some of these types of sicknesses around
39 through ice roads and putting them to other areas. I
40 just want your opinion on that.

41

42 DR. FERGUSON: Yeah, I can touch on
43 that. I guess the first thing I'd mention is that this
44 Saprolegnia mold is definitely a freshwater species or
45 living lakes and rivers. We're not finding in your
46 coastal ocean area. It may be brackish, but it's
47 certainly not a marine organism. With that said, I
48 mean it is quite common in pretty much any body of
49 water, so I don't really see it being transmissioned
50 between a smaller, kind of local -- you know, that

1 geographic scale where it's going from one pond or lake
2 to another. It's probably present in both. The
3 organism itself, I mean it is a saprophyte. That's
4 it's primary -- I mean that's why it's named that. It
5 decomposes material, so it's going to be anywhere
6 there's organic material because it has to be broken
7 down in nature.

8

9 So I really don't think that there
10 would be a concern for transmission of exotic
11 introduced mold. It's everywhere essentially. But if
12 there's an increase in nutrients for the mold, you
13 might see higher numbers of it. Even though it's
14 already present, you know, maybe it's growing faster
15 because it's got more nutrients from, you know, maybe
16 that material that's thawed out, you know, all the
17 plants in the tundra that are then going into the soil
18 that are going into the water. They have to be broken
19 down and Saprolegnia is going to do that. If there's a
20 lot of it, then it's going to grow and grow and grow to
21 break down all that material.

22

23 Did that make sense?

24

25 MR. G. BROWER: Well, to the limited
26 understanding that I can listen to that part.

27

28 (Laughter)

29

30 DR. FERGUSON: Yeah.

31

32 MR. G. BROWER: But, yeah, it does, it
33 does make sense. There was a concern that we thought
34 there could be some connection, but if it's prevalent
35 all over the North Slope.....

36

37 DR. FERGUSON: Yeah. I mean it's
38 common, but the numbers, you know, I mean that might be
39 something important to look at. If the study were to
40 go forward, you'd want to look at organic roads in
41 these systems that are of concern. It's kind of like
42 an indirect link basically. The mold is there, but
43 there's several things that can affect the amount of it
44 and whatnot.

45

46 MR. G. BROWER: Just one follow up, Mr.
47 Chair.

48

49 CHAIRMAN BROWER: Yes, Gordon.

50

1 MR. G. BROWER: This is something I
2 expressed yesterday and since you're a fish person and
3 I think there's some other fish person here as well,
4 concerns with climate change and around very important
5 fish habitat near Barrow, the Tusikvoak Lake, I'm not
6 sure if you're familiar with that one, but there's the
7 Sungovoak Lake and then there's the Tusikvoak Lake.
8

9 To my understanding from elders that
10 passed already, maybe some are still alive today,
11 Sungovoak has developed a creek, more like a river
12 nowadays, which it never existed but was created by
13 LVTs, like landing craft used by the Navy, that
14 compacted the shoreline of the Sungovoak Lake and
15 created an easy flow for the lake to go out. It's how
16 an accelerated -- before all this climate change issues
17 were around. That's what my folks talked about back in
18 them days.
19

20 The government was doing anything and
21 everything, including plowing the tundra. But that was
22 a consequence of a manmade happening for Sungovoak is
23 my understanding. Then the water levels come down for
24 the lake, equally having nature do its own course of
25 action about climate change. These lakes that are
26 habitat known for resources for many, many, maybe
27 thousands of years now. They really should be
28 monitored, I think.
29

30 Tusikvoak I'm hearing from different
31 hunters, fishermen, that the catch rate in that lake
32 has substantially dropped. It's a major resource lake.
33 I'm hearing that from many different fishermen that
34 say, well, they pull their nets, they caught only one
35 in two weeks. We pulled our nets because we only
36 caught one in maybe, you know, three or four weeks
37 period of time, but noticing that the water level was
38 kind of low over there as well.
39

40 Anyway, I just thought maybe that could
41 be something looked at, monitored, for fish people.
42 Maybe that's an area where this mold might strike
43 because, like you said, oxygen and these kind of
44 things, when it's the dead of winter, the amount of
45 freeze, it comes down. Potentially the fish only have
46 maybe two or three feet of water underneath to swim
47 around in and make it very concerning. Anyway, just
48 thought I'd bring that up since there's fish people.
49

50 DR. FERGUSON: Yeah, it's good to

1 monitor. It definitely would be good to monitor
2 habitats in those areas of interest.

3

4 MR. G. BROWER: Thank you.

5

6 CHAIRMAN BROWER: Thank you, Gordon.

7

8 MS. AHTUANGARUAK: This is Rosemary and
9 I have a couple questions. Is there things that we
10 could consider to help us intercept this in different
11 ways? Are we to be worried about this getting
12 transferred into our fishing gear and creating a
13 problem with receding when we're doing our activities?
14 Are there concerns for ways that we can help make
15 recommendations on activities around our nearshore
16 environment that may be contributing to this, such as
17 water discharges from some of these plants that are
18 nearby that may be affecting the viability of the water
19 and the fish coming through these areas during our
20 fishing season? Are any of those kinds of things
21 things that we could do?

22

23 DR. FERGUSON: I think the first part
24 of that with fishing gear transmitting from one body of
25 water to another, that's not really a concern because
26 the mold is in both, you know. The other part that you
27 touched on about discharge and things, you know, other
28 activities, I guess, that can change habitat, you know,
29 water discharge and whatnot, those wouldn't be
30 something -- I guess maybe I don't understand this real
31 well, but the folks that are doing the fishing and
32 whatnot, my understanding is that's maybe, you know,
33 companies or something that's discharging things in the
34 water different and so the water quality that could be
35 affected by different activities, that might be
36 important to look at.

37

38 So we just get back to basically, you
39 know, anything that could stress the fish. So the mold
40 comes into contact with the fish all the time and fish
41 have a real good way of dealing with that with their
42 slime on the outside of their body, but when they get
43 stressed or they're spawning, they're more susceptible
44 to actually getting infected. If they're stressed all
45 the time, then they're more likely to get that
46 infection. If the habitat and the water quality is
47 within their optimum range to live in, then they're not
48 going to be stressed and they're going to be able to
49 just withstand the presence of the mold.

50

1 So, yeah, I mean looking at things like
2 pollution in terms of organic or like a lot of areas
3 like an agricultural area where there's a lot of
4 nitrates and fertilizer getting into the waterways,
5 that would be linked to, you know, susceptibility of
6 those fish getting an infection if they got that kind
7 of stuff going in, but in terms of like just fishing
8 gear, I don't see that as being, you know, anything
9 that's going to stress the fish or ruin the water
10 quality.

11
12 MS. AHTUANGARUAK: Thanks for all this
13 information. It's very helpful. There needs to be a
14 process in which we get some communications out through
15 the radio to help educate our people and to help
16 encourage them to participate with this type of
17 collection of fish that will help us assess what's
18 going on.

19
20 Thank you.

21
22 DR. FERGUSON: Yeah, definitely.

23
24 CHAIRMAN BROWER: James and then
25 Robert. Did you have another question or comment?

26
27 MR. SHEARS: No, he just answered it.

28
29 CHAIRMAN BROWER: Okay. James.

30
31 MR. NAGEAK: This is James Nageak for
32 your record from Anaktuvuk Pass. I was reading the
33 report here. I was wondering what's the term here
34 luxurious growth of white cottony aerial mycelia. What
35 does that mean?

36
37 DR. FERGUSON: Yeah. So in my overview
38 I tried to use terms that were not as technical, you
39 know, like I did in the report. Basically that means
40 luxurious is just a way of describing there was a lot
41 of growth and then the mycelia is the fungus
42 structures. It's the branched structures of the mold.
43 It's just a technical term used in the discipline,
44 which goes in all our reports. If you look over the
45 overview that I put together for my talk, that breaks
46 it down into what those words -- you know, common
47 descriptions of what that is. When I mentioned what it
48 looked like under the microscope, I mentioned that it
49 was branched, it didn't have divisions, you know, it
50 had these round structures that form spores. So that's

1 what that means, you know. It's a lot of growth of
2 white fungus basically.

3
4 MR. NAGEAK: Thank you. Another
5 thought I had about the affect of the hydrology of the
6 area and what affect does melting permafrost have on
7 the hydrology of the area. You know, I'm from
8 Anaktuvuk Pass and that's 2,200 feet up in the air and
9 it's higher than North Slope, so there's a flow coming
10 from our area through the Anaktuvuk River into the
11 Colville and then on into the Arctic Ocean. I wonder
12 whether there has ever been any study on how that
13 melting permafrost is affecting the hydrology system.

14
15 DR. FERGUSON: Yeah, I don't know of
16 any study, you know, particularly for that region, but
17 in general terms, I mean I guess you'd maybe have to
18 talk to a hydrologist to see exactly what can occur.
19 What I would kind of take a stab here at answering
20 would be -- it kind of gets back to what the other
21 gentleman had mentioned where this melting occurs and
22 you get erosion basically off your banks and you're
23 getting a lot of soil and plant material that's in that
24 soil dumping in the river. I would think that would
25 affect the hydrology and habitat. It's putting more
26 organic material in there that has to be broken down.
27 It's causing turbidity, you know, so that it's not as
28 clear water, so fish won't be able to see as well and
29 things like that.

30
31 We certainly -- you know, those were
32 interesting questions and it's certainly a larger thing
33 than what our lab can answer and get at. But, yeah, I
34 mean that would be good to get some hydrology folks in
35 there looking at what's happening with all this
36 discharge of material that's eroding off the banks and
37 how that's affecting things, you know, for fish in
38 particular.

39
40 MR. NAGEAK: I think that there would
41 be a stressful time for a fish to all of a sudden take
42 a gulp and it's different than what it used to be, you
43 know, because.....

44
45 DR. FERGUSON: Yeah. There's a lot of
46 material in the water there. It's turbid and they
47 can't see and it's got soil and, you know, like you
48 said there, ingesting some of that, it could be
49 stressful definitely and it certainly would change the
50 water quality parameters.

1 MR. NAGEAK: Yeah, I'm curious about
2 that. We do get a lot of fish that go up the river,
3 Colville and into Anaktuvuk and the Chandalar River.
4 We get the arctic char and the lake trouts there at the
5 lake. When the fish are running in the summertime, you
6 know, the arctic char and Dolly Varden, we get those in
7 the summertime, so there are concerns and how the
8 melting -- the longer summer seasons that we've been
9 having. You know, you've never heard of Anaktuvuk Pass
10 having to be about 85 to 90 degrees in the summertime.
11

12
13 We've seen some changes in the tundra
14 or, you know, we'd be going along on our trail in the
15 summertime and all of a sudden there's a big drop
16 because the tundra had dropped maybe four or five feet
17 down. There's something happening underneath there
18 that made that thing to drop.
19

20 Thank you.
21

22 DR. FERGUSON: Yeah. Yeah, habitat
23 would be definitely something to get those folks
24 involved in.
25

26 CHAIRMAN BROWER: Robert, you said the
27 question you were going to ask was already brought
28 forward?
29

30 MR. SHEARS: Not really. Answered for
31 myself, but for the public let me repeat it. I hear
32 Jayde saying Saprolegnia is not a cause but a symptom
33 of stress on the fish. You know, as he is looking at
34 trying to look at other conditions that could be
35 causing the stress, he's finding out that he has --
36 there's a lack of information, a lack of baseline
37 environmental knowledge about the river system. We
38 don't have water quality samples that we can draw on
39 for testing, you know, stored anywhere or baseline
40 assessments. You know, we don't have old tissue
41 pathology stored. It's just indicative to me of the
42 greater problem in regards to the environmental
43 baseline, our knowledge, the science side of our
44 knowledge, how limited it is. That's all.
45

46 DR. FERGUSON: Yeah, that's a great
47 point and that's -- I mean not just in this case, but
48 all kinds of things that tie into that. So it would be
49 great to get a more robust monitoring program because
50 it's related to all kinds of different things. In this

1 particular case, it's really hard to tease things out
2 because I mean not only the lack of water quality data,
3 but even if there was there's still this other factor
4 that's important and that's their spawning condition.
5 I mean this can happen to just a normal spawning fish.
6 It's part of the way their bodies break down when
7 they're spawning. It's actually a physiological change
8 or hormones. In particular, males seem to be more
9 affected where they don't produce as much mucus and
10 they become thus more susceptible to any organism
11 that's in the environment that can take advantage of
12 that exposed skin, you know.

13

14 So it's really hard with spawning fish
15 to determine, you know, which is it. Was it just
16 because of normal spawning or is there environment
17 stress there due to water quality that's making it
18 even, you know, a higher prevalence of these fish
19 getting affected or whatever. You'd have to have fish
20 that are not sexually mature and expose them and see,
21 you know, if it can be done, if it causes the infection
22 in the absence of spawning conditions.

23

24 CHAIRMAN BROWER: Did that help, Bob?

25

26 MR. SHEARS: Yes. Thank you.

27

28 CHAIRMAN BROWER: We have one of our
29 participants here wanting to comment and raise some
30 questions, Jayde. Taqulik.

31

32 MS. HEPA: Thank you, Mr. Chair.
33 Members of the RAC. It's an honor to be here. Taqulik
34 Hepa, director of the Department of Wildlife Management
35 for the North Slope Borough. A very good presentation
36 and good discussion. I just wanted to add what the
37 North Slope Borough, Department of Wildlife Management
38 has in regards to continued monitoring with this
39 specific concern that was brought to our attention from
40 the residents of Nuiqsut.

41

42 So we are going to continue to monitor
43 the situation. Right now we have plans to travel to
44 Nuiqsut the next several weeks to collect samples from
45 burbot just to monitor if the mold has transferred from
46 species to species and we will work with local
47 fishermen to collect samples. During the break-up time
48 we also would like to -- we're planning to have a
49 presence in Nuiqsut to see if there was any die-off of
50 fish during the break-up time.

1 In the fall time, we will have ongoing
2 monitoring, collecting samples from fish that are taken
3 by local fishermen. I just wanted to share that with
4 you that we do have a monitoring plan in place. Dr.
5 Raphaella Stimmelmayer and Todd Sformo are taking the
6 lead from our department as well as Billy Adams.

7
8 CHAIRMAN BROWER: Todd, did you want to
9 add onto that? Come on up to the mic.

10
11 MR. SFORMO: Todd Sformo. I work for
12 Taqulik. I just wanted to make a few other comments.
13 As Taqulik mentioned, we do have a monitoring plan for
14 the coming year and we also will be taking water
15 samples and looking specifically for this mold now that
16 we do have the genetic level identification of this
17 mold. So we've sent off samples and it's been
18 positively identified in this genus.

19
20 It can persist in the environment for a
21 long time depending on the state of reproduction, so it
22 has a real complicated life cycle. It goes through a
23 sexual and the asexual reproduction and I believe it's
24 the sexual reproductive stage that can be very cold
25 hardy, salt tolerant, heat tolerant. So it really does
26 depend on the state of reproduction of when the mold is
27 in the environment that the fish may encounter it.

28
29 There is a lake near the Nigliq Channel
30 that was also fished at the same time that the fish
31 mold was being found in the channel and that lake was -
32 - the fish were free of mold at least at that time of
33 the year. So obviously we'll be looking at that again
34 and that was just very close to those areas.

35
36 ABR has been out in that area working
37 on the kaaktak fishery for a number of years, so they
38 do have water samples and analyses of the water in that
39 area for the last 10, maybe 15 years. Unfortunately
40 they do the sampling during that fishery and it tends
41 to be right after the aanaakliq fishing. It still is a
42 resource and the water measurements are nitrate,
43 nitrite, ammonia levels, levels of organic material in
44 the water. So we do have a little bit of information
45 to go on, so that is a positive.

46
47 The last point was just to clarify. I
48 don't think a number of people thought that this mold
49 was necessarily something exotic. I think the main
50 concern was that if this mold is really present in the

1 environment as Jayde has mentioned and it's been
2 reported a lot. I mean it's everywhere from here all
3 the way to Antarctica. If it's prevalent in the
4 environment, I think the main question wasn't why does
5 it seem exotic as much as it is why is the mold coming
6 up being on fish at this point. So we have very few
7 records in the North Slope and Jayde mentioned the one
8 in the Inaru River in the 1980s, so that was just one
9 fish with that mold that we had recorded up until this
10 point.

11

12 So I just wanted to emphasize I don't
13 think many people thought it was necessarily an exotic
14 mold as much as it was why is it occurring now if it's
15 so prevalent in the environment. Thanks.

16

17 MR. G. BROWER: I have a question for
18 Todd too.

19

20 CHAIRMAN BROWER: Gordon.

21

22 DR. FERGUSON: Yeah, that's a good
23 point probably. I guess just one thing I'd add to that
24 and it sort of gets back to monitoring as well is even
25 though there haven't been a lot of reports in the past
26 maybe nobody's been looking for it and also, you know,
27 if it's incidently found in catches or whatever, maybe
28 it's not reported systematically, you know. So I mean
29 getting all those reports from various groups of people
30 and compiling that is important, you know, so there's
31 that.

32

33 I'd still get back to the time of year
34 it's occurring is in the spawning season, which is
35 extremely important. I can actually provide papers on
36 that. They've done studies where they'll do spawning
37 maturation in fish in a controlled environment and
38 they'll develop the disease. You know, they can take
39 fish that are sexually immature juveniles, inject them
40 with hormones and they'll get the infection, so that is
41 definitely one cause.

42

43 It's hard to separate that out from
44 anything else that's changed in the environment, so
45 monitoring is definitely important.

46

47 CHAIRMAN BROWER: Thank you, Jayde.
48 Gordon.

49

50 MR. G. BROWER: A few years ago --

1 well, it's quite a while, there was age studies on the
2 fish in the Ikpikpuk area. I think Craig George was
3 part of that maybe and also aging and the fish were
4 long lived. They didn't die after they spawned, but
5 they were probably stressed after they spawned as well.
6 But I'm wondering if any of these fish -- you know,
7 what their life stage is when they got the mold. Is it
8 in all age brackets that you're seeing with the ones
9 that are currently caught or is this something that
10 this is a 42-year-old fish, it's getting ready to die
11 and it's just roaming around doing that? I'm just
12 wondering if it's affecting different age factors of
13 that fish.

14

15 MR. SFORMO: Billy and I, when we went
16 to Nuiqsut, we measured a number of the fish that were
17 caught that had the mold and that did not have the mold
18 and the size of the fish didn't seem to matter at all.
19 They were all basically the same. So you could have
20 male and female and same size fish that had the mold
21 and didn't have the mold.

22

23 We didn't find many small aanaakliq at
24 all, but I don't know if that may be due to the size
25 mesh, so we don't have very good information at the
26 moment on younger and smaller aanaakliq and whether
27 they have it or not. So that would be one of the
28 things that Taqulik was talking about. When we'd go
29 out next, we'd have a variable mesh size in order to
30 catch the smaller broad whitefish as well as the larger
31 to see if they do have the mold or not.

32

33 DR. FERGUSON: Yeah, that would be a
34 good thing to look at and see if you could -- if you
35 can even sample like juveniles, that would be really
36 helpful. Because if we're seeing it in the juveniles,
37 then that really does support, you know, some sort of
38 environmental issue if they're not sexually mature. So
39 when we go out in the spring looking for morts, you
40 could look for young of the years or whatever.

41

42 CHAIRMAN BROWER: Gordon.

43

44 MR. G. BROWER: Just be careful when
45 you put your size mesh because I put the wrong size
46 mesh when I was fishing one time and, holy cow, there
47 was like 400 fish of the smaller size, so you've got to
48 be careful.

49

50 MR. SFORMO: Thanks.

1 CHAIRMAN BROWER: James.

2

3 MR. NAGEAK: On the sampling of the
4 hydrology of the area, we had a big storm here in 1963
5 and it affected some of the lakes around the area. One
6 of them was at Nuwuk. Of course the scientists at that
7 time wanted to find out what salinity factor was in
8 those lakes after that big storm and I did the sampling
9 for Dr. Durham. I don't know if you remember Dr.
10 Durham back in the 1960s. So every month I'd go to
11 Nuwuk and then I'd go to Teshekpuk Lake.

12

13 Bobby Fischer and I would get this
14 little auger, hand-held auger, and we'd drill the hole
15 on that big lake on the ice. The way that they let me
16 do the sampling was that we had little vials that they
17 had set up and every feet they would be -- and they had
18 cork cover. When I'd get them down to the bottom of
19 the lake, I would open them all at the same time and
20 the sampling from the depth, different depths of the
21 lake. That's the way they let me do the sampling. Of
22 course I'd go back to the lab and see how the salinity
23 difference was in each level. If you take the sampling
24 at the top of the lake, the bottom part is a lot
25 different. There's a different sampling down there.

26

27 I just wanted to make sure that when
28 you do the sampling that different levels of the lake,
29 you know, are just like in the big oceans, they're
30 different layers. So I wanted to ask if in the
31 sampling this type of sampling is happening.

32

33 Thank you.

34

35 MR. SFORMO: Yes. When Billy and I
36 went out, we sampled right at the surface and at the
37 bottom, so we had two water samples that we took at
38 those two distinct locations in order just to see
39 exactly what you said, what is the difference between
40 the upper layer and the bottom layer of that river. So
41 we definitely have done that and we're going to
42 continue to do that.

43

44 We also did it for salinity too because
45 at a certain time there is kind of a saltwater wedge
46 that comes up the Colville River, so we were wondering
47 if that saltwater had made it in the area where we were
48 sampling and at that time it hadn't, so the bottom was
49 the same as the top. There was really no salinity. It
50 was fresh water at the time. There was no difference

1 in the other measurements of the water samples from the
2 top to the bottom at that time.

3
4 But, yeah, I thank you and we'll
5 continue to do that.

6
7 MR. NAGEAK: Thank you.

8
9 CHAIRMAN BROWER: Finally my turn.
10 I've got to read out of my notebook. I've been taking
11 notes, Todd and Jayde and Taqulik, I've got a whole
12 list of questions.

13
14 (Laughter)

15
16 CHAIRMAN BROWER: No, I'm just kidding.
17 Anyway, this is very informative and there's a lot of
18 things that are just stirring up in my mind in terms of
19 the amount of discussion and the monitoring and the
20 information presented regarding the conditions that
21 we're -- you know, the global climate change impacts
22 that associate at different stages through the season.
23 Summer being the most important one. The thawing of
24 the permafrost, the recharge of the lakes not as
25 adequate as it used to be because of our previous
26 winter conditions that snow accumulation didn't occur
27 as much as it used to and not recharging the lakes,
28 which makes the lakes dry out in the sense that the
29 water column is much lower within the lakes.

30
31 In regard to the life span of this
32 fungal matter, there's questions in my mind in terms of
33 how long does it persist on the fish once it's been --
34 seemed to attach itself to the fish. Does that kind of
35 life span of that fish -- or through that life span of
36 that fish, how long is that fungal matter going to be
37 persistent or have it being -- not persistent, but
38 being on that fish? Is it going to remain for the rest
39 of its life now or is it at some point in time that
40 fungal matter going to drop -- you know, lessening the
41 amount in the area as to what you see in the picture.

42
43 There's a big effect in the area and
44 then over the course of the winter the water quality
45 may change. Nutrients that this fungal matter lives
46 off of lessen and it condenses itself to a smaller
47 portion or eventually eliminate itself. I don't know.
48 Those are the things I'm trying to think about in terms
49 of what we should be looking for in the oncoming
50 season. We find this stuff during the, as it's been

1 mentioned, during the spawning season. It's not so
2 prevalent during the summer months before the spawning.
3 There may be some reports of those types of findings
4 from other fishermen in different states.

5
6 In regards to mapping, you know, where
7 these things are being found near the Colville or the
8 community of Nuiqsut and in regard to mapping of that
9 river system where were the most concentrated efforts
10 being conducted in terms of monitoring this fish. Did
11 it change as you get further away from a certain area
12 or start from the community of Nuiqsut. If you're
13 going further away from Nuiqsut, what's the fish along
14 that river increased in numbers with the mold on it or
15 did it lessen within the concentration in the ranges
16 away from the community?

17
18 Those are the kind of things I'm just
19 thinking about in my mind in terms of long-term
20 monitoring because these fish are very important to our
21 communities for food. We're looking for the health
22 state of the fish that we would rather provide -- you
23 know, be provided for food.

24
25 In regards to that mapping, you know,
26 there's these incidents before and what accelerates
27 that fungal matter in its life cycles. What
28 accelerates this thing? I hear these different things
29 through the report, Jayde, but I need to better
30 understand what is it in the environment that it
31 thrives off of?

32
33 You know, if there's these things that
34 -- I'm cognizant about remembering there's the drilling
35 fluid that happened near the Colville where the
36 drilling fluids were being released into the
37 subsurface, not knowing where they went, and could that
38 be part of the acceleration of this fungal matter if
39 it's concentrated near Nuiqsut? I don't know. It was
40 something having to do with drilling underneath the
41 subsurface for the pipe crossing.

42
43 So those things I have in my mind that
44 I bring up and question. Could some of that be part of
45 that? This fungal matter being persistent in the
46 tundra and in the lakes and streams, it kind of
47 dissipates in a sense that maybe it's not so much
48 associated with this activity that occurred, but -- and
49 other things happening.

50

1 So those are the kind of things I have
2 in my mind I just keep wanting to learn more about and
3 see what information comes out of these things. I look
4 at this species as a food source for our people and
5 it's not just along the Colville that the fish are
6 present. There's the Ikpikpuk River, the Topagoruk
7 River and the coastal areas and they go back out into
8 the ocean and come back. The movement of that fish,
9 you know, it's huge.

10
11 I mentioned to you, Todd, and others
12 about when my grandmother used to tell me about these
13 fish. She used to think that these were the same fish
14 -- the fish got taken out in the Fish Creek River were
15 the same fish that went up the Chipp and Ikpikpuk
16 Rivers through the Smith Bay and Admiralty Bay. It has
17 two accesses and including the fish in that Fish Creek,
18 which is in that Harrison Bay, are the same fish. She
19 used to think -- she used to tell me she used to think
20 that these rivers meet up way up in the tundra
21 someplace and the fish go in a circle. I never
22 mentioned to her that they may be swimming back out
23 into the ocean and coming back around at a different
24 location, you know. It's just her thinking that the
25 rivers met someplace up there and the fish went in a
26 big circle in that sense. That's what she would be
27 explaining to me.

28
29 The concern about when fish are at this
30 stage and where this fungal is transmittable through
31 fishing gear, if you harvest a bunch of fish that were
32 sick like this and you continue to use that same net,
33 is that net transmitting that fungal matter to the
34 other fish? What kind of life span if the gillnet
35 retains some of that fungal matter on the net itself?
36 Is that a pathogen to transmit to other fish nets or
37 other fish?

38
39 These kind of things just keep going
40 through my mind as the presentation was going on. It
41 just raises more concerns sometimes than need be.
42 Again, you know, we have other situations that still
43 are unanswered. This is something that I think we
44 could continue monitoring in regards to our fisheries.

45
46 You know, within our Federal
47 Subsistence Management Program, fisheries is part of
48 our agenda topic and this is something that needs to be
49 elevated in the sense that both the State and Federal
50 agencies working together and help provide additional

1 information as to what's being done here. This is a
2 lot of information that we're trying to work with, but
3 the end result is are these fish going to be in a
4 healthy state for our subsistence users to take for
5 food. That's my biggest concern and I wanted to make
6 that known.

7

8 You know, we raise all these questions,
9 but at the end are these fish going to be in a healthy
10 state or is this going to cause a big die-off of that
11 species, not knowing how that fungal matter -- is it
12 accelerating it on the fish over the course of winter
13 or is it decreasing as winter sets in because of the
14 conditions of the water, food, the food the fish is
15 eating may be different from the time of food
16 availability in the summer months.

17

18 I don't know. You know, these are the
19 kind of questions I'm thinking in terms of what would
20 it take to make that fungal matter disappear from the
21 fish. You know, is there something that we could put
22 in the water? If it's a concentrated area, what is it
23 that we could put in that water column to lessen the
24 availability or the impact to that fish along the
25 Colville? I mean these are the kind of thoughts.

26

27 I mean because we talk about oil spill
28 and dispersants for dispersing oil, but here's a real
29 live fungal matter that we're dealing with in the river
30 column on a species of fish that we utilize for food.
31 If that same kind of thought could be brought on to
32 help the conditions of the fish is something I'm
33 looking to look forward to working with and through our
34 Council and the science behind all this.

35

36 These are -- I mean, like I said, it's
37 just there in my mind and in the sense that it just
38 keeps revolving and raising more concern, maybe more
39 ideas. I don't know. It just continues, you know, the
40 discussion and more dialogue is needed. It's one of
41 our -- I have to keep repeating. It's an important
42 fish resource for our communities and when the
43 community goes without that type of food source to
44 supplement their dietary needs, it becomes a hardship.
45 We've experienced that in each of our villages for
46 different resources. When one gets impacted, the flag
47 gets raised higher. That's just the thing I have to
48 communicate to you in regard to this fish.

49

50 Thank you for being here, Taquulik and

1 Todd and Jayde. I'm not sure if there were other
2 discussion points you would like to provide at this
3 time.

4

5 DR. FERGUSON: Yeah. I mean I
6 definitely appreciate all those points and we'd be
7 happy to answer any of those questions. You guys feel
8 free to contact us on any of these fish issues. I
9 don't know if I can touch on everything that was
10 mentioned there, but I guess certainly, you know, is a
11 plan just put together on monitoring or whatever. Feel
12 free to contact our lab or, you know, ideas or
13 whatever.

14

15 CHAIRMAN BROWER: Thank you, Jayde.
16 James.

17

18 MR. NAGEAK: Yeah, I forgot to mention
19 that I did the sampling of the ice core that we got
20 drilling the ice on the lake. I would cut the ice core
21 into sections and melt the ice so that I could figure
22 out how much salinity differences there were from the
23 bottom of the ice and also on the top.

24

25 I also wanted to thank a new definition
26 of what luxurious means.

27

28 Thank you.

29

30 (Laughter)

31

32 CHAIRMAN BROWER: Is that it, James?

33

34 MR. NAGEAK: Yeah.

35

36 CHAIRMAN BROWER: Thank you, everyone
37 for -- Doreen, come on down. Again, Taqulik and Todd,
38 thank you.

39

40 MS. LAMPE: Good morning, Mr. Chairman.
41 Doreen Lampe for the record. I had mentioned yesterday
42 that we're trying to create a hunter/gatherer
43 commission and some of these concerns regarding the
44 fish mold are quite alarming as a consumer of these
45 fish. Basically we want to know if they're safe to eat
46 and, if we do have this fungus fish, is it safe to feed
47 that part to the dogs or how do we dispose of it
48 without spreading the fungus? So we are concerned
49 about the impacted fish in that region.

50

1 How can this Council help us to
2 identify some impact funding for this type of problem
3 that is starting with the fish? If it's the water
4 source, you know, will it impact the migratory birds,
5 will it impact the migrating caribou, the furbearing
6 animals? We would like to find out basic consumption
7 rates of, you know, how many can you eat, is it safe to
8 eat, safe to give it to your dogs, how to dispose of it
9 properly. So we've got quite a few concerns regarding
10 some of these impacts that are occurring and how to get
11 the impact aid that's needed for these impacts that
12 we're feeling today.

13

14 Thank you.

15

16 CHAIRMAN BROWER: Thank you, Doreen.

17

18 DR. FERGUSON: I could try to answer a
19 couple of those questions here. With the human health
20 concern with Saprolegnia, it's not a human health
21 concern. I guess it's sort of analogous -- I don't
22 know how many people are familiar with ichthyophonus
23 that's in the chinook on the Yukon River there, but
24 it's really -- the fish doesn't look appetizing, you
25 know, but it does not infect people. You know, you
26 could cut off the affected parts, but there really
27 isn't a human health concern here. It's just product
28 quality, you know, sort of a deal.

29

30 MS. HEPA: Mr. Chair, if I can add to
31 that.

32

33 CHAIRMAN BROWER: Yes, Taqulik.

34

35 MS. HEPA: Doreen, I thank you for the
36 concerns that you did bring up and we did hear the
37 exact concerns coming from the residents of Nuiqsut at
38 the time it was happening. From the experts, such as
39 the man on the phone and Raphaela, they did indicate to
40 us that the fish were safe to consume by humans. The
41 residents and the local people in our department did
42 discuss that and we did have reservations and concern
43 about eating sick -- or fish that have signs of mold or
44 of the disease that we are talking about.

45

46 One thing that we did advise in the
47 outreach materials that were sent out was to use your
48 customary and traditional practices when you handle
49 diseased or injured or sick animals. Basically over
50 our time as we evolved our people have learned to

1 protect ourselves from sick animals. At least the way
2 that I was raised is when you come upon a sick animal
3 or an injured animal, most likely they're not good for
4 consumption, so we do not eat those types of animals.
5 In addition, just the way that we prepare our food,
6 like aging it before you eat it raw, making sure that
7 you cook it or dry it properly. So I think we have
8 things in place from our customary and traditional
9 practices.

10

11 CHAIRMAN BROWER: Thank you, Taqulik.
12 Jayde, did you have another response to -- you said a
13 couple. I heard one, so I wasn't sure if you were
14 quite done with your responses.

15

16 DR. FERGUSON: Yeah. I mean I think I
17 touched on most of that. Some of the stuff earlier I
18 guess that was brought up I could go over briefly as
19 well. I was just thinking here. One question was
20 brought up on how long it stays on the fish. Fish are
21 constantly being exposed to it and it's sloughed off
22 through their mucus and controlled that way. Once the
23 fungus takes hold and you see those large lesions that
24 you see, you know, that's pretty advanced and it's
25 likely those individual fish will eventually die as it
26 progresses. They basically can't osmoregulate and the
27 water is coming in through those ulcers. It's possible
28 there's a small percentage of fish that can overcome
29 that, but once it gets so far and widespread across the
30 body like that, they're probably not going to survive.
31 Most of them. So that would be the answer there.

32

33 With the monitoring, what would come in
34 as important is how many of these fish are affected. I
35 mean if only a handful, which is what we've seen so
36 far, don't make it after spawning, you know, it might
37 not have an impact at the population level, but if
38 there's a large amount of fish that are affected, then
39 that's a different thing. So that would be the answer
40 there is that when it becomes really advanced, huge
41 areas on the fish that are eroded like that, they
42 probably won't make it.

43

44 The other question I guess I was going
45 to touch on was any sort of treatment. Even though
46 this is controlled in fish hatcheries with chemicals
47 like Formalin and things like that, but I don't see
48 that really being a practical or even legal way of
49 controlling it in a wild environment because those are
50 pretty harsh chemicals to be putting in the environment

1 to try and kill this mold infection in the handful of
2 fish that are affected or whatever. So I don't see
3 chemical treatment really being a viable solution.

4
5 The only thing I can think of is just
6 some sort of habitat modification, I guess. I mean
7 there are some projects out there that have tried to
8 modify habitat to reduce disease or stress on fish.
9 You know, dam removal, for example, in the Lower 48.
10 They're removing several dams to improve habitat. So
11 that might be more of, I guess, a realistic approach, I
12 guess, some sort of modification of the habitat. Not
13 knowing what's going on in the habitat it's hard to say
14 what could be done, but if there's a lot of discharge
15 of organic material, maybe there's a way to flush some
16 of that out or hold back the bank. Again, you'd have
17 to talk to like a hydrologist or habitat folks.

18
19 CHAIRMAN BROWER: All right. Thank you
20 for sharing that, Jayde. I guess I'm maybe looking to
21 maybe Doreen's question in regards to impact aid if you
22 may know about something regarding impact aid. I
23 didn't quite hear anything on that.

24
25 DR. FERGUSON: Oh, the human health?

26
27 CHAIRMAN BROWER: Doreen wasn't.....

28
29 DR. FERGUSON: I guess.....

30
31 CHAIRMAN BROWER: Go ahead, Jayde.

32
33 DR. FERGUSON: I guess I wasn't clear.
34 So you're just wondering about the human health impact?

35
36 CHAIRMAN BROWER: Doreen is coming down
37 and I'll give her an opportunity to comment.

38
39 DR. FERGUSON: Okay.

40
41 MS. LAMPE: Thank you, Mr. Chairman.
42 Doreen Lampe for the record with Inupiat Community of
43 the Arctic Slope. We're trying to create a
44 hunter/gatherer commission and we're lacking some
45 funding. If we're seeing our resources have this
46 impact already, what type of impact aid is available
47 for tribes to take advantage of this funding that is
48 surely needed by a lot of the tribes out here that are
49 barely operational with one or two staff at the most in
50 some of the smaller villages. We do see impacts and we

1 do see these environmental impact statements and we see
2 very little impact funds.

3

4 DR. FERGUSON: Unfortunately I don't
5 have any answers on funding. We're a diagnostic lab,
6 so I would definitely not be the appropriate person to
7 ask on that. I guess maybe there's some folks on the
8 Council that are -- well, I know Eva had spoke to me
9 about this being a topic of interest to fund, so she
10 would probably be the best person to ask on what's
11 available in terms of funding.

12

13 CHAIRMAN BROWER: Eva, did you want to
14 share some comments.

15

16 MS. PATTON: Sure.

17

18 CHAIRMAN BROWER: Thank you.

19

20 MS. PATTON: Mr. Chair and Council and
21 Doreen. Thank you for your questions. I know we had
22 received some calls from Nuiqsut and others as well
23 seeking ways to do the type of monitoring that the
24 Council has requested and talked about here. We will
25 be providing an update next after this about the
26 subsistence program, Fisheries Monitoring Program, and
27 it's limited funds, but it's a very specific program to
28 address subsistence fisheries concerns and there's a
29 high emphasis on collaborative projects with tribes and
30 communities or North Slope Borough. Karen will speak
31 in more detail about those opportunities next.

32

33 There are some other sources of folks
34 who do contaminants monitoring and address concerns for
35 human health and I can follow up on both those leads
36 with specific questions from the Council and the
37 communities or your organization. Fish and Wildlife
38 Service does have a contaminants lab based in
39 Fairbanks. Their director, Angela Matz, has done some
40 excellent subsistence fishery sampling with subsistence
41 fishers in the Y-K Delta extensively looking at metals
42 contaminants and that sort of thing. Things that would
43 be of concern to human health. So I can follow up with
44 that contaminants lab and see what sorts of
45 opportunities there are there. I know in the past
46 they've had joint funding between the State and the
47 Feds to do this sort of broad scale sampling for
48 subsistence foods. She did do caribou work also across
49 the North Slope.

50

1 So that's -- they're a great resource.
2 The other is the Alaska Native Health Consortium,
3 Alaska Native Tribal Health Care Consortium, and they
4 have excellent research staff with a big focus on
5 subsistence foods, monitoring for contaminants and any
6 human health concerns. Because it is the Tribal Health
7 Care Consortium, a good focus, as Taqulik had
8 mentioned, of looking at the local and traditional
9 knowledge and making sure that it's really understood
10 if there is a health concern, also the importance of
11 the health of eating traditional foods, so they're very
12 good about communications as well. I can follow up
13 with them to see if there's some opportunity to make
14 some connections there.

15
16 Thank you.

17
18 MS. LAMPE: Thank you, Mr. Chairman.
19 My other concern I had was if this is habitat area
20 source of contamination that is now seeing in the fish,
21 is it going to affect other habitat users, such as the
22 migratory birds or the migrating caribou or the
23 furbearing creatures, if they did start drinking that
24 water or human beings started utilizing that water when
25 they're out camping. If it has been identified that it
26 is a habitat contamination issue for those fish, will
27 it contaminate other species. That is my other
28 question I was trying to get across earlier.

29
30 Thank you, Mr. Chairman.

31
32 DR. FERGUSON: Oh, okay.

33
34 CHAIRMAN BROWER: Thank you, Doreen.

35
36 DR. FERGUSON: I can try to answer
37 that. Sorry I didn't quite catch that earlier. So
38 with impacts to other species, the non-fish species,
39 marine mammals, birds and whatnot, specifically with
40 the Saprolegnia mold, I guess it gets back to the human
41 health concern. I mean it's not a human health
42 pathogen and it wouldn't be one for other mammals. It
43 grows in a range of, as I mentioned before, about 3 to
44 33 degree Celsius, so it doesn't grow, you know, at a
45 warm-blooded temperature. So that would be one thing
46 to keep in mind in terms of that concern.

47
48 In terms of any habitat changes that
49 are linked to these fish getting a mold or developing
50 the infection from the mold that's present, I guess not

1 knowing what those habitat changes are it's difficult
2 to speculate on how that would affect birds and other,
3 you know, species that utilize that habitat, not
4 knowing what, you know, what contaminant or what water
5 quality parameter is affected.

6
7 If it's a high organic road, that's
8 just organic material in there, that shouldn't cause
9 other terrestrial species to be affected because they
10 don't live in the water full time. It could be some
11 sort of pollution contaminant. That could be a problem
12 for other animals. Without the information on the
13 habitat itself, it's really difficult to answer a
14 question like that. It was reassuring though that the
15 pollutants that were tested came back negative, so
16 there's no heavy metals or oil, you know, hydrocarbons,
17 but other things should be tested for.

18
19 CHAIRMAN BROWER: Again, thank you,
20 Jayde, for your responses. That's helpful and gives an
21 idea of a way forward on some of these discussion
22 points. We've had a fairly healthy discussion on this
23 overview. I'm not sure if there's anymore questions or
24 comments to any of the -- maybe even from the
25 teleconference participants.

26
27 MS. AHTUANGARUAK: One more question.

28
29 CHAIRMAN BROWER: Yes, Rose.

30
31 MS. AHTUANGARUAK: There is a lot of
32 nitrous oxide that's released into the air related to
33 gas development processes. This is something that can
34 accumulate over time to get to the stage where we're
35 seeing an increased process of this abnormality.

36
37 DR. FERGUSON: Nitrous oxide, that was
38 the compound you mentioned. So that's going up in the
39 air. I suppose some air pollutants could enter into
40 the water environment. One example I can think of is
41 mercury. There's a lot of that produced by industrial
42 plants, you know, far away even, like in the Lower 48,
43 that is up in the air and it's moved around with air
44 currents and it actually can settle into remote areas,
45 like in Alaska. So that can happen with certain air
46 pollutants. The example of mercury, I mean that was on
47 the list of metals that were tested.

48
49 Nitrous oxide, I mean it's a gas, so
50 it's going to be in the air. It could settle out in a

1 different form of nitrogen and that would be, you know,
2 things that are -- it sounds like they're being looked
3 at now, like ammonia and nitrite and nitrate. It
4 sounds like that's being built into the monitoring to
5 look for those nitrogen compounds.

6

7 MS. AHTUANGARUAK: Okay. Thank you.

8

9 MR. G. BROWER: The chairman is taking
10 a small, little dialogue in the corner and I m going to
11 take advantage of that.

12

13 (Laughter)

14

15 MR. G. BROWER: There was this little
16 pamphlet from ICAS that was handed around and we talked
17 about this a little bit yesterday. She mentioned it
18 from ICAS, Doreen Lampe, Arctic Slope Hunter/Gatherer
19 Commission. Also the question about looking for
20 funding. There is a fund called Autaaqtuq Fund. It
21 resides in the mayor s office. It's a fund that was
22 created from multiple oil and gas companies. It's got
23 several, I don't know, maybe 200,000, three, four,
24 maybe about 500,000 in there to use for various
25 different things. There's a mechanism how to access
26 those funds. I think something like this there's a
27 criteria that you have to fit into to qualify for its
28 use. I would look into that. It's called Autaaqtuq
29 Fund.

30

31 MS. LAMPE: Good morning, Gordon.
32 Doreen Lampe. Thank you. We have utilized that in the
33 past and we will consider funding that. Putting in an
34 application for funding on that. We're still in the
35 very early stages yet. We haven't actually created the
36 commission. We're trying to pass a tribal sensitive
37 areas map. We utilize some of the maps at GIS where
38 they did provide the NPR-A villages and show community
39 sensitive areas within the NPR-A. So we just did the
40 survey this summer or last summer and we're hoping to
41 contract someone with GIS capabilities to produce the
42 information that was gathered to produce a similar map
43 to the villages within NPR-A that have that map for
44 their communities.

45

46 Thank you for that opportunity.
47 Appreciate it.

48

49 CHAIRMAN BROWER: Thank you, Doreen.
50 If there's no other comments or concerns to be voiced

1 regarding this agenda item, I thank you all that
2 participated for this presentation.
3
4 DR. FERGUSON: Thank you.
5
6 CHAIRMAN BROWER: Help me with his
7 name.
8
9 MS. PATTON: Jayde.
10
11 CHAIRMAN BROWER: Jayde, thank you for
12 providing the information and sharing the handout.
13 That's very informative. Again, we'll definitely keep
14 in communications with concerns that are voiced by our
15 community members.
16
17 DR. FERGUSON: Thank you, sir. Thank
18 you everyone else as well for listening and we re happy
19 to try and help out. We're here to help, so any
20 questions feel free to contact us.
21
22 CHAIRMAN BROWER: Thank you. So at
23 this time I'd like to entertain a 10 minute recess.
24
25 (Off record)
26
27 (On record)
28
29 CHAIRMAN BROWER: I'd like to call back
30 to order again the North Slope Regional Advisory
31 Council. We still have a few more agenda items yet to
32 address. Briefing on Fisheries Resource Monitoring
33 Program. We have.....
34
35 MS. HYER: Karen Hyer.
36
37 CHAIRMAN BROWER:Brendan -- help
38 me with the last name. Brendan.....
39
40 MS. PATTON: Scanlon.
41
42 CHAIRMAN BROWER:Scanlon. Dolly
43 Varden, char, FRMP Kaktovik. I'm not good with
44 acronyms, but there's one right there. Fisheries
45 Research Monitoring Program. Is that it?
46
47 MS. PATTON: Yes.
48
49 CHAIRMAN BROWER: I could give it my
50 own title because I didn't see anything else. Karen.

1 MS. HYER: Good morning, Mr. Chairman,
2 and Council members. For the record, I'm Karen Hyer
3 with the Office of Subsistence Management. I just kind
4 of wanted to highlight how I think we should approach
5 this. I'm going to kind of give you an overview of the
6 Fisheries Resource Monitoring Program and the process.
7 We just finished that process, but we're going to start
8 again in the fall.

9
10 I'm going to quickly go over that and
11 take any questions you might have and then we're going
12 to talk about the priority information needs because
13 the research on the Fisheries Resource Monitoring
14 Program is driven by the priority information needs, so
15 I want your input for that.

16
17 Then we have a Partners for Fisheries
18 Monitoring Program. Is Palma on the line this morning?
19 I didn't -- okay. So I'll give you a little bit of an
20 introduction and she can give you a very quick overview
21 of it. We are going to be accepting proposals for that
22 this fall. It's more for your information than
23 anything else.

24
25 Then we have Brendan here and he's
26 going to present a project that we just received
27 funding through the last go round with the Fisheries
28 Resource Monitoring Program, so he's going to introduce
29 to you what he's going to be doing up in this area in
30 the next couple years. So that's kind of how I
31 envision approaching this.

32
33 So, without further ado, we'll just
34 start. The FRMP information starts on Page 40. It
35 just kind of generally lays out our Fisheries Resource
36 Monitoring Program. What our Fisheries Resource
37 Monitoring Program is is a program that administers
38 money and we get money every year through the whole
39 ANILCA -- they set aside some money for research for
40 fisheries projects. The funded fisheries projects help
41 us manage Federal subsistence fisheries. So that's the
42 overlying issue we're trying to address, is fisheries
43 resource monitoring.

44
45 As you're familiar, we have the state
46 divided up into several regions and you can see down
47 here on the bottom of Page 40 each region has a Council
48 associated with it and each region will have priority
49 information needs that we'll address through the next
50 call.

1 So what happens is we have this money
2 allocated and we put out a call and we ask for research
3 projects that meet these needs. If they don't meet the
4 needs that are expressed in the call, things that are
5 expressed as a priority, then they have to justify why
6 the project would be important to fund. So we fund
7 projects that address the call, but we also fund
8 projects that don't address the call if the
9 investigators do a good job of describing why their
10 research is important to Federal subsistence fisheries
11 resource monitoring and management.

12
13 So we put this call out. So this
14 coming November we'll put a call out and we'll ask for
15 research proposals and then these proposals come in to
16 our office and they're evaluated by a Technical Review
17 Committee and the Technical Review Committee evaluates
18 them on a couple criteria and you can see that criteria
19 listed at the bottom on Page 41 where it says funding
20 recommendations.

21
22 So the Technical Review Committee will
23 evaluate these proposals for research on strategic
24 priority, so they'll evaluate how they respond to what
25 has been identified as a strategic priority in the
26 region. Then the projects will be evaluated on
27 technical merit to ensure that they're technically and
28 scientifically sound. Then they'll also evaluate them
29 on the ability of the researcher to complete the work.
30 Finally they're evaluated on partnership and capacity
31 building because part of the call for these research
32 proposals, one of the criteria we ask for is that they
33 include a partnership and capacity building component.
34 So the Technical Review Committee will evaluate the
35 proposals that are submitted on these criteria.

36
37 If you remember in the last meeting
38 there were several projects this last go around that
39 were submitted that had things like climate change in
40 their title and that's been a really important issue up
41 here and the Council brought up a question as to why we
42 funded what we funded and why we didn't fund some of
43 the other projects, which appear to be addressing
44 important issues in this region. One of the reasons
45 was that the projects weren't technically sound or they
46 weren't developed enough.

47
48 Another issue that we stumbled across
49 is that they hand-develop the capacity building
50 component of the project and so if the project

1 addresses a strategic priority but doesn't address
2 these other components, it probably will not get
3 approved for funding through the Technical Review
4 Committee. So that's the first cut. Once the
5 Technical Review Committee weighs in on fund or do not
6 fund, we go before the Councils with these and we ask
7 the Councils to evaluate them on the priority to the
8 region. They can't really evaluate the proposals on
9 their technical and scientific merit because they don't
10 see the proposals because they're proprietary, so they
11 only see the overviews.

12
13 We go to the Councils and we ask them
14 what really is important in your region and given these
15 proposals which ones do you feel are important. Then
16 after that we take your recommendation and the
17 Technical Review Committee's recommendation and we take
18 it to the InterAgency Staff Committee and those are the
19 individuals that work with the Federal Board and they
20 also don't see the actual proposals. They just see the
21 Technical Review Committee's recommendation and your
22 recommendation and they put those together and they
23 make a recommendation also.

24
25 Those recommendations are grouped
26 together and they go before the Federal Subsistence
27 Board. The Board makes the final decision as to what
28 to fund and what not to fund. That recommendation was
29 just made recently here for the last go round of
30 projects. Once that decision is made, and it was made
31 last January for projects, then OSM, based on the
32 funding that they have available will fund those
33 projects.

34
35 Because our budget changes from year to
36 year we never know exactly what we're going to be able
37 to fund, but the idea is that we're collecting a group
38 of projects that we're committing to for anywhere from
39 two to four years of funding and we'll fund those
40 projects and they'll go out to the field and they'll
41 collect the information and then report back to us and
42 also report back to the Councils about what they find.

43
44 We're just finishing up a funding
45 cycle, so these projects will go in the water this year
46 in 2014 and we won't have new projects again going into
47 the water until 2016. But because the process is so
48 long we'll start this fall 2014 talking about what our
49 priority information needs are at the Council. We've
50 already started a little bit talking about that and

1 we'll continue here in a few minutes.

2

3 That's the overall process that takes
4 place for funding these projects. I'm going to pause
5 now and address any questions you might have. Mr.
6 Chairman.

7

8 CHAIRMAN BROWER: Thank you, Karen.
9 Just for my review on Page 40, the square on the bottom
10 of Page 40, Regional Advisory Council, funding regions,
11 Northern, Yukon, Kuskokwim, Southeast, Southcentral and
12 then the next column reads Regional Advisory Councils,
13 North Slope, Northwest Arctic and Seward Pen, then on
14 the Yukon it says Yukon-Kuskokwim Delta, Western
15 Interior, Eastern Interior. Then again on the third
16 one it goes Kuskokwim and then there's Western Interior
17 and Yukon-Kuskokwim Delta. It seems to be duplicating
18 regions in two different regions and I'm trying to
19 understand why there's a clumping of these specific
20 regions and duplication of number 2 and number 3. It
21 seems to be that there's more funding availability for
22 this area than anywhere else. Just my perception of
23 what I'm seeing here. Is that how that's structured or
24 is that something that's just an oversight in terms of
25 how this table is presented?

26

27 MS. HYER: The Western Interior
28 Regional Advisory Council deals with both the Kuskokwim
29 and the Yukon because of the areas that Council covers.
30 So they do make recommendations for both those rivers
31 and there are -- we get a total amount of funding and
32 we do allocate it by region, so they do get to weigh in
33 on two regions. So, in that way, your evaluation is
34 true. They do get to say what happens in two different
35 regions at two different funding sources.

36

37 We have divided up the state through
38 Board guidelines, so we divide up the money in a way
39 that allows us to spread it throughout the state, but
40 that is just a recommendation. So if we have an area
41 where we have several really good projects and maybe
42 they go above the guideline and we have another area
43 where we don't have good projects, because it's just a
44 guideline we'll fund the good projects.

45

46 Up until this year we've always had
47 more funding than we have had good sound projects.
48 This was the first year that we actually had to make a
49 decision and we made that decision in the Kuskokwim
50 area to not fund projects that we probably would have

1 funded if we'd had more money. So that's a little bit
2 about how that works.

3

4 In Northern Region, you have North
5 Slope, Northwest Arctic and Seward Peninsula all weigh
6 in on projects, so we've funded a project in Northwest
7 Arctic, we funded a project in Seward Peninsula and we
8 funded another one in the North Slope area, but all
9 three Councils get to weigh in on all those projects
10 and that's just an artifact of the way our regions were
11 created.

12

13 Our regions were created when we dealt
14 with wildlife. We dealt with wildlife before we dealt
15 with fish. Sometimes, from a fisheries perspective,
16 they don't make a lot of sense, but they're an artifact
17 of the program when it was first initiated and fish was
18 not part of it.

19

20 CHAIRMAN BROWER: So if there was a
21 recommendation to separate any of these, I'll speak to
22 our Northern Region, because of just the last comment
23 you just made because of the fisheries being somewhat
24 different, there may be similarities, but they're
25 different in our respective regions and the conditions
26 that are presented are not the same as well. If
27 there's a recommendation for separation of these areas,
28 what steps would be needing to occur to make that type
29 of recommendation? Why is it not advisable to do so?
30 I'm just questioning because of just what I'm reading
31 here.

32

33 I've known this to be in place for
34 quite some time, but it's not -- you know, I kind of
35 feel uncomfortable trying to make recommendations as to
36 what kind of research priorities should be happening in
37 Seward Peninsula or Northwest Arctic because they have
38 their own interest and concerns within their respective
39 region.

40

41 MS. HYER: Mr. Chairman. Your
42 observations are correct and these regions apply to
43 more than the Fisheries Resource Monitoring Program.
44 So I think from an administrative perspective it might
45 be a challenge to divide them up. What has happened in
46 the past that seems to work quite well is that the
47 Regional Advisory Councils in their specific areas have
48 not commented on projects in other areas.

49

50 So when the Northwest Arctic Council

1 met, they didn't comment on projects that were in the
2 North Slope area or in the Seward Peninsula. They only
3 gave feedback to the projects that were within their
4 own area because they expressed exactly what you
5 expressed and they didn't feel comfortable. So that
6 kind of is historically how things have been done up
7 here.

8

9 CHAIRMAN BROWER: Any other questions
10 or comments from Council members.

11

12 MR. G. BROWER: Mr. Chair.

13

14 CHAIRMAN BROWER: Gordon.

15

16 MS. AHTUANGARUAK: Um.....

17

18 MR. G. BROWER: Maybe Rosemary, I
19 think, was going to say something. I'll let her go
20 first.

21

22 CHAIRMAN BROWER: Rosemary, you can go
23 first.

24

25 MS. AHTUANGARUAK: I was just going to
26 say that I hope that we come up with a few variables.
27 I think our attempt last year was too broad, but it was
28 a few possibilities of things that we could consider
29 and hopefully get funded over the process. I think
30 we've had a lot of good discussion over this meeting
31 and within our community that we should be able to come
32 up with some good proposals.

33

34 Thank you.

35

36 CHAIRMAN BROWER: Thank you, Rosemary.

37

38 Gordon.

39

40 MR. G. BROWER: Just trying to
41 understand a little bit better here. I'm not worried
42 about the different regions that are mixed here. In
43 terms of proposals, what is an example of a proposal to
44 do monitoring? Also for existing monitoring in studies
45 that have been done in terms of maybe population,
46 escapement, other things like that, in other parts of
47 Alaska, are those used for enforcement of those
48 resources by other categories of users up to and
49 including the subsistence user on how much is going to
50 be available for harvesting or if these studies are

1 going to prohibit the take of the subsistence
2 resources?

3

4 I've heard some good concerns out of
5 Akiak in the Kuskokwim River where their nets either
6 are confiscated or destroyed. Basically people going
7 hungry in those areas because their subsistence
8 resource is heavily impacted somewhere for maybe even
9 centuries people have been fishing and fishing without
10 detriment to the population. Maybe there's issues
11 somewhere else. Maybe open ocean catching, what they
12 call bycatch or ocean intercepts or something like that
13 by other big fishing trawlers that do this stuff
14 because all of these fish, especially like salmon, go
15 out in the ocean to grow and then come back to spawn.

16

17 So I want to get a little bit more
18 understanding on what are the consequences on proposals
19 and these kinds of things.

20

21 MS. HYER: Mr. Chairman. Council
22 members. We fund a wide array of projects throughout
23 the state of Alaska. As you're well aware, issues are
24 very different in different places. On the Kuskokwim
25 and in the Copper River, those are two that come to
26 mind, we fund -- on the Kuskokwim we fund weirs and on
27 the Copper River we fund fishwheels and these are just
28 two examples of many, many projects we fund.

29

30 As you know, there are issues with
31 chinook salmon throughout the state of Alaska and we do
32 help with this money to monitor fish escaping into the
33 river. On the Kuskokwim, that goes into their
34 escapement goals. They do on the Kuskokwim open and
35 close all fisheries, from commercial fishery to
36 subsistence fishery to sport fishery based on how many
37 fish are in the river. So there are some projects in
38 that region that help. On the Copper, for example,
39 they had no idea how many chinook salmon were migrating
40 up that river before we started doing research there.

41

42 We have helped the Native Village of
43 Eyak through funding to establish an escapement project
44 for chinook salmon on that river. It's the only
45 escapement project for chinook on that whole river.
46 There's a really important subsistence fishery there
47 and that project has been running now for maybe 10
48 years and they actually discovered that there were more
49 fish going up the river than they thought when they
50 first started monitoring it. So they've been able to

1 monitor the kind of the ebb and the flow of the fish
2 migrating up that river and they're seeing chinook
3 salmon decline also on that river because we're seeing
4 that statewide.

5
6 You're right, there are many things
7 that play into the decline and simply getting fish up
8 the river is just one component of it. But those are
9 two issues where we have funded escapement projects.
10 One has actually helped for more liberal harvest in the
11 river because there are actually more fish in the river
12 than they thought and the other one has helped for a
13 more conservative approach because they're very
14 concerned about their chinook on the Kuskokwim and
15 that's probably what you're hearing about.

16
17 No projects of that nature have
18 happened up here. Projects up here have been more
19 about studying populations. They've been very active
20 in Northwest Arctic about getting an estimate on Kobuk
21 and sheefish populations, but not to impose regulatory
22 -- or not to impose regulations on those fisheries but
23 to better understand climate change and things like
24 that. The projects in the north have been of a
25 different nature because the needs here are very
26 different than in other places. So those are just some
27 examples.

28
29 MR. G. BROWER: Mr. Chair.

30
31 CHAIRMAN BROWER: Continue, Gordon.

32
33 MR. G. BROWER: Yeah, it would just --
34 I hear about it because I trade for smoked salmon with
35 muktuk and with folks over that way, especially through
36 my brother-in-law, his brothers fish in Akiak, up and
37 down that river, and their regulatory climate is very
38 restrictive over there. I think it shouldn't be,
39 especially for the tribes and those kind that have to
40 survive on these things. I've heard of these concerns.

41
42
43 You're saying all fisheries get closed,
44 the commercial, the sport, the personal use. Without
45 the latter, you know. You close the commercial, you
46 close the sport and personal use, but you conserve for
47 the last part of the subsistence user at that point.
48 It seems like the connection is -- maybe I'm not
49 getting it right. Those that subsist in making their
50 dried fish over there are heavily impacted. I don't

1 know if it stems -- if we were to ask for studies to
2 population trends and declines or issues of that, if
3 that kind of rule would come around for us.

4
5 MS. HYER: To date that hasn't been an
6 issue in the north and there have been population
7 studies, especially on the sheefish as I was talking
8 about on the Kobuk and the Selawik. We just had a
9 presentation and they're concerned about a slump on the
10 Selawik and we just had a presentation from Randy Brown
11 who has done some work there and I asked that specific
12 question. I said, well, if this climate change is
13 affecting this population and you see a decline in the
14 population, because right now we don't monitor that
15 harvest at all, I said would there be an issue and he
16 said no because now we know enough from our research to
17 know that the fish from both the Kobuk and the Selawik
18 come down and we know that the Kobuk stock is very,
19 very healthy, so that will probably be able to support
20 the subsistence fishery if the Selawik sheefish
21 population does decline. Right now we don't know that
22 it will decline. We just know that it might possibly
23 decline. That is what the research is looking into.
24 So, at this point, because of the nature of the
25 fisheries up here, there haven't been any management
26 restrictions

27
28 MR. G. BROWER: Mr. Chair.

29
30 CHAIRMAN BROWER: Yes, Gordon.

31
32 MR. G. BROWER: Sitting down with old-
33 timers for many, many years and talking about what they
34 did during reindeer herding times and they depend on
35 other food sources, like lakes and fishing. They used
36 to take a lot of depth measurements of lakes to see how
37 deep they are and transport fish and move them around
38 to make a stock for their own purposes. That was done.
39 My dad was part of that. Some of the reasons for it
40 back in the '40s, like the lake that we're concerned
41 about, Tusikvoak, back in the '40s and '50s they
42 actually put dynamite in the lake to take a measurement
43 for seismic. The next summer there was hundreds and
44 hundreds of dead fish. It was allowed to try to
45 recover on its own over years and years.

46
47 It seems to me efforts should be made
48 to -- and I don't know if that's what you guys do as
49 well, is to look at the concerns raised by traditional
50 users and do some of that. I mean I, myself, would

1 probably do something like that too.

2

3 MS. HYER: Looking at the concerns and
4 the historical harvest of subsistence users would be
5 something that we would fund under this. We do use the
6 information. We had a discussion yesterday about C&T
7 and C&T determinations. Part of determining if
8 somebody has a history of harvesting any animal is by
9 talking to local people and collecting that information
10 and we have done that in other places. We've done a
11 little bit of that work up here too, but that is
12 something we'd be very interested in because we
13 actually use that then directly for management of
14 fisheries.

15

16 MR. G. BROWER: I won't take too much
17 more time. Those fish change once they're landlocked
18 in lakes. Their taste is very much different than the
19 river -- going back and down the rivers there.
20 Distinctly different taste. I actually prefer the ones
21 in the lakes. They're really fattened up and they're
22 really -- maybe their food source in the lake is
23 different. But they do change when they're in the
24 lakes versus when they're free going up and down the
25 rivers to lakes that are open, so they would become a
26 different type of a fish almost. I can really attest
27 to the different taste that it becomes.

28

29 CHAIRMAN BROWER: James.

30

31 MR. NAGEAK: This is James Nageak. You
32 were saying that there's not much impact on the
33 northern part of the state, but there are some impacts
34 in the lower part, like the Kuskokwim. What I'm
35 hearing Gordon is saying it's impacting his
36 relationship with the people in the Lower Kuskokwim
37 area which he trades with. So what's happening down
38 there is also affecting the northern part and the
39 relationship between the north and the southcentral
40 down there.

41

42 So if you use the monitoring system to
43 make regulations affecting the fish that it be caught
44 down there and it's not affecting the northern part,
45 but actually what's going on down there is also
46 affecting the people that do -- we get a lot of good
47 salmon from down there too, you know. We have some
48 good friends that we trade with, you know. They like
49 our dried meat from Anaktuvuk Pass and we sometimes
50 really like to have that big fish, the king salmon.

1 They're fatter down there when they're coming into the
2 river system. They're different when they get to
3 Tanana or, you know, there's two different types of
4 fish. So I'm just making the comment that what's going
5 on down there is also affecting us up here.

6

7 MS. HYER: That's a very good comment.

8

9 CHAIRMAN BROWER: Any other questions
10 for Karen regarding the Fisheries Monitoring Program.

11

12 (No comments)

13

14 CHAIRMAN BROWER: I guess I'll just
15 read the mission of the monitoring program is to
16 identify and provide information needed to sustain
17 subsistence fisheries on Federal public lands for rural
18 Alaskans.

19

20 Did you have more discussion topics
21 regarding this program?

22

23 MS. HYER: I have several things, but I
24 think Eva has something.

25

26 CHAIRMAN BROWER: Yes, Eva.

27

28 MS. PATTON: Mr. Chair, Council. If I
29 may respond to a couple questions here just to clarify.
30 The Fisheries Resource Monitoring Program has two
31 avenues and one is looking at population and trends and
32 population status of fish, so interaction with climate
33 change. The other specifically is to document local
34 and traditional knowledge of fish and those concerns
35 that the community is seeing in terms of a relationship
36 with fish, changes in harvest, concerns that the
37 community have. So when this priority call goes out,
38 the priorities really are identified.

39

40 This is a subsistence research program,
41 so the priorities really get originated first and
42 foremost from people in the region here to help
43 identify that. We've had a lot of good discussions
44 over teleconference and in the meeting. That call will
45 go out officially the next meeting that we have. But
46 just to be aware that that's what really drives those
47 priorities and we're seeking to make that call clearer.
48 As Rosemary had identified, it was a little too broad
49 last time to get some really good proposals that
50 address the concerns of the Council and the

1 communities.

2

3 Also you had mentioned how the
4 information is used in the regulation. Federal
5 subsistence priority is managed for for fisheries, so
6 this information feeds into that management. So other
7 fisheries are closed first because of the Federal
8 subsistence priority. So the information does help to
9 support that subsistence priority as well.

10

11 Thank you.

12

13 CHAIRMAN BROWER: Thank you for sharing
14 that, Eva.

15

16 James.

17

18 MR. NAGEAK: I was just looking at the
19 eligibility requirements to get into the funding or to
20 put in proposals to the Fisheries Monitoring Program.
21 On Page 43, you know, you have organizations that have
22 the necessary technical and administrative abilities
23 and resources to ensure successful completion of
24 programs may submit proposals. Under that some of them
25 are tribal governments. I don't know how a tribal
26 government would have all the technical and
27 administrative abilities and resources to make a
28 successful proposal to the monitoring system.

29

30 MS. HYER: Mr. Chairman. Council
31 members.

32

33 CHAIRMAN BROWER: Somebody on the
34 teleconference has put on their telephone and there's
35 an echo created if the phone has not been muted. So,
36 Tina, what's the process for muting the phone, or Eva.

37

38 REPORTER: *6.

39

40 CHAIRMAN BROWER: Reach for the star
41 and press 6. When you get there, we'll mute your
42 phone. Thank you.

43

44 Karen.

45

46 MS. HYER: Mr. Chairman. Council
47 members. Actually Page 43, you're getting ahead of
48 yourself. That's the Partners for Fisheries
49 Monitoring. We're going to talk about that in a bit.
50 I just wanted to point that out. Your point is very

1 well taken.

2

3 What we have done in the past is --
4 you're right, there's certain entities that have
5 interest, but they don't have the technical ability to
6 do the research. We've working very successfully in
7 pairing those entities, say, with the university or
8 somebody else that has the technical ability that's
9 interested in pursuing that knowledge. Partnership and
10 capacity building is a component of what we ask for
11 when we ask for these proposals. Many of our
12 researchers are very interested in partnering with
13 local people who might not have the biological
14 expertise, but they have all the local expertise and
15 that's what makes our projects truly successful.

16

17 The project that I referred to on the
18 Copper earlier, they partnered with a consulting firm
19 that provided a lot of the technical expertise and
20 helped them establish those projects and help them get
21 to the point that they now run -- the Native Village of
22 Eyak runs those projects by themselves. They didn't
23 have that technical expertise, but through our program
24 they were able to partner with somebody that did and
25 then they were able to provide all the knowledge of the
26 river that these scientists that came from Outside
27 didn't have, and all the traditional knowledge about
28 how to build the fishwheels. So together they
29 partnered for a successful project and that is what
30 makes some of our projects really successful, is
31 combining the local knowledge with the scientific
32 knowledge.

33

34 So you're absolutely right in your
35 statement that those organizations don't have that
36 ability and we work very hard to partner those
37 organizations with people that do.

38

39 MR. G. BROWER: Just one more.

40

41 CHAIRMAN BROWER: Gordon.

42

43 MR. G. BROWER: What was the fishwheel
44 partnership for? I mean why would you have to partner
45 to -- is it a monitoring aspect or is it a fishwheel to
46 gauge population and what did you do with the fish if
47 that was part of a project?

48

49 MS. HYER: They tagged the fish and
50 then -- they caught the fish, they tagged the fish and

1 then they turn them loose and then they catch them
2 again upriver and there's quite a complicated
3 statistical model that goes along with making the
4 estimate, so the consulting firm provided the
5 statistical knowledge to build the model. They also
6 worked with biologists at OSM. We helped build that
7 model too. They had to figure out how to build the
8 fishwheels to fish in the areas because fishwheels
9 weren't traditionally used in that part of the river,
10 but they wanted to be able to safely catch and handle
11 these fish.

12

13 One other thing they did is they built
14 a holding tank or kind of a holding basket where they
15 had a shoot where the sockeye could leave because they
16 were much smaller fish and it kept the kings that they
17 wanted to estimate and that took several years to
18 develop. They tried to do it through video technology
19 and they weren't successful at that, but they worked
20 with a consulting firm to try to develop that. So
21 there were many different things that took place in
22 that project over the years.

23

24 Another component of it is they wanted
25 to understand where the fish were spawning, so they
26 used radiotelemetry and all of those things they worked
27 in conjunction with the consulting firm to do because
28 they didn't necessarily have the expertise to
29 administer those programs. Through time they were able
30 to build up their program. They have a lot more
31 expertise than when they started out.

32

33 CHAIRMAN BROWER: I'm just looking at
34 this eligible applicants including regional Native non-
35 profit. That would be like Inupiat Community of the
36 Arctic Slope. And then Federally recognized tribe
37 would be Native Village of Barrow. Tribal government.
38 Native corporations would be like Ukpeagvik Inupiat
39 Corporation or Nunamiut Corporation and the other non-
40 profits. That's the one I'm having a hard time trying
41 to identify who is our other non-profit that we would
42 identify with on the North Slope. That's what I was
43 trying to visualize and get clarity on in terms of who
44 these organizations are.

45

46 Regional Native non-profit
47 organizations, Federally recognized tribal governments
48 and Native corporations, and other non-profit
49 organizations. AEWC? That's because I'm a whaling
50 commission. We're going fishing. That's what I was

1 trying to get clarification on. I was just trying to
2 figure out -- identifying which organization would be
3 eligible for this Partners for Fisheries Monitoring.

4
5 MS. HYER: Mr. Chairman. If you're
6 ready to leave the Fisheries Resource Monitoring
7 Program -- this is under that umbrella, but this is a
8 little bit -- the Partners for Fisheries Monitoring is
9 a subset and you're clearly getting ahead of me. So if
10 we want to talk about that, let's talk about that now
11 and then we'll go back to the priority information
12 needs.

13
14 CHAIRMAN BROWER: If we could take our
15 lunch break and come back after lunch and do that.

16
17 MS. HYER: Absolutely. We can start
18 with this and do the information needs.

19
20 MR. G. BROWER: Can I just ask a last
21 question.

22
23 CHAIRMAN BROWER: Gordon and then Eva.

24
25 MR. G. BROWER: From what we've talked
26 about today and yesterday I have concerns on, is there
27 anything in there that you see could be turned into a
28 proposal so far?

29
30 MS. HYER: Yes, very definitely. If
31 you could hold that thought until after lunch, I'd like
32 to discuss that under the idea of the priority
33 information needs because we're also starting to work
34 on those and there's been a lot that's been presented
35 that I think will fit into that and I'd like to tell
36 you a little bit about that process too. That's also
37 under the Fisheries Resource Monitoring Program
38 umbrella, but that's kind of an avenue that we're going
39 to begin developing. We've actually already worked a
40 little bit on it and we've had some teleconferences
41 with some of you. So probably should leave that until
42 after lunch too.

43
44 CHAIRMAN BROWER: Okay. Eva.

45
46 MS. PATTON: Mr. Chair. I was just
47 going to respond to your question about looking at
48 others. There is a Partners Program which we'll talk
49 about after. Other agencies that are open for
50 partnering, the North Slope Borough for example. Your

1 department -- I mean clearly these are fisheries
2 projects and not wildlife projects, but people who have
3 scientific capacity that are working with the local
4 communities are very much a good possibility for
5 partnerships in the region. ICC, the Inuit Circumpolar
6 Council. I actually have those reports. Carolina Behe
7 had addressed the Council at our last meeting
8 addressing food security.

9

10 So groups like ICC that are non-profits
11 that are already working in the communities can address
12 through the traditional knowledge grants those types of
13 concerns and other non-profits you may be aware of or
14 university partnerships. It's really quite open and
15 creative and we're also a resource to help if you have
16 questions for networking and that sort of thing. We're
17 here to help as well.

18

19 Thank you.

20

21 CHAIRMAN BROWER: Thank you. At this
22 time I think we'll go to our lunch recess. We'll be
23 back at 1:15.

24

25 MR. G. BROWER: Enough time to check
26 the post office.

27

28 CHAIRMAN BROWER: Okay, 1:15.

29

30 (Off record)

31

32 (On record)

33

34 CHAIRMAN BROWER: Call the meeting back
35 to order and we're still on the Fisheries Monitoring
36 Program. Karen, did you have any other -- we were
37 still on the discussion of the Fisheries Monitoring
38 Program and we jumped ahead a little bit into the
39 Partners for Fisheries Monitoring. I'll see where you
40 want to pick up unless you want to respond to the
41 questions earlier.

42

43 MS. HYER: Mr. Chairman. Council
44 members. We can pick right up with Partners for
45 Fisheries Monitoring and then talk a little bit about
46 the priority information needs. We have Brendan, who
47 will talk to you about the upcoming fisheries project
48 in this area. Without further ado, let's talk about
49 Page 43 since you've all already been there.

50

1 We have a program called the Partners
2 for Fisheries Monitoring Program where we support
3 fishery biologist, anthropologist, and educators in
4 rural organization. Currently we have no partners up
5 here in the north, but we have partners in other
6 regions and we are going to be putting out a call in
7 November. So you guys have read -- because of your
8 questions I can tell you've read this little briefing
9 here. Basically we just wanted to make you aware in
10 November that there will be a call coming out and we
11 fund positions within these organizations up to
12 \$150,000 and these positions work with us on
13 subsistence issues. Many of them are involved in our
14 Fisheries Resource Monitoring Projects and then they
15 work with the Councils and they provide information and
16 they live in the local communities.

17
18 So currently we just wanted to make you
19 aware that this is coming up in the fall. As the fall
20 gets closer, we'll have more specific information and
21 we'll be notifying you. That basically was all I had
22 for that. I'll take any questions.

23
24 CHAIRMAN BROWER: Any questions to
25 Karen regarding the Partners for Fisheries Monitoring.

26
27 (No comments)

28
29 CHAIRMAN BROWER: If no questions,
30 continue Karen.

31
32 MS. HYER: Okay. Let's go back and
33 talk about the priority information needs because the
34 first thing we do when we put out a call for the
35 Fisheries Resource Monitoring projects is we put out
36 that call with the priority information needs that have
37 been expressed by our Councils. You have expressed a
38 lot of possibilities in this meeting.

39
40 So what I'll do is I'll go back and
41 I'll work some of them up and then we'll continue to
42 keep the dialogue going. I'll also consult some of the
43 land managers and some of the fisheries biologists that
44 work in the area and then I'll be revisiting these
45 issues with you again and again until this fall when we
46 have a pretty clearly articulated specific list of what
47 the Council considers priorities, but if there's
48 anything else that you want to add that hasn't been
49 discussed here today or yesterday, now is the time to
50 do that.

1 Like I said, this is just the beginning
2 of a discussion that will continue until this fall, so
3 it's not the last time we'll be talking about it, but
4 it is a chance to give me any other input.

5
6 CHAIRMAN BROWER: Any comments,
7 concerns. James and then Gordon.

8
9 MR. NAGEAK: I see that there is going
10 to be some cooperative agreements to support these
11 positions and there will be fishery biologist,
12 anthropologist, and educators as principal and co-
13 investigators and a combination of all of them. Then
14 you have a local community where you are going to -- I
15 don't know what percentages are those in funding for
16 the biologist and then the local people.

17
18 MS. HYER: What we have done in the
19 past is we have funded biologists and anthropologists
20 and educators within local organizations, so the local
21 organizations have put in proposals. This is also a
22 competitive process as are the fisheries research
23 projects. So when the call comes out in November,
24 organizations that are interested can put proposals in.
25 When the call comes out, the parameters will be within
26 the call.

27
28 We're just letting you know at this
29 point that the call is coming in November, but we'll
30 have descriptions of what you need to apply for these
31 positions. At that point, organizations that are
32 interested in having an anthropologist or a biologist
33 or some kind of social scientist or some kind of
34 educator can create proposals to submit for the
35 competitive process.

36
37 MR. NAGEAK: And those would be
38 different or separated from the local proposal?

39
40 MS. HYER: No, those would be from
41 local organizations. Those proposals would be from
42 local organizations for those positions and those
43 positions are within those organizations.

44
45 MR. NAGEAK: So those local proposals
46 will have the expertise included in the proposal?

47
48 MS. HYER: No, the Partners are
49 actually an opportunity for local organizations to hire
50 that expertise. We provide the funding, up to

1 \$150,000, and then they hire a biologist or an
2 anthropologist. So that's how they get their
3 expertise, is they actually have the finances to hire
4 that.

5
6 MR. NAGEAK: So if our organization is
7 interested in making a proposal, are there limitations
8 as to how much we'll be able to pay the biologist or
9 social scientists?

10
11 MS. HYER: Actually the positions that
12 we fund through the Partners we pay the biologist, so
13 the organization like the -- one of them we have is the
14 Kuskokwim Native Association and they put forth a
15 proposal for a fisheries biologist that they wanted and
16 they described what they would do and how they'd be
17 involved in our monitoring projects. They competed
18 with other organizations to put in proposals too and
19 then we chose their proposal and then we funded that
20 position for them so that the organization didn't have
21 to come up with the money for the position. They just
22 had to come up with the ideas of what the biologist
23 would do that worked for them.

24
25 MR. NAGEAK: And then you pay for them.

26
27 MS. HYER: Yeah. And then we have the
28 money to pay for the position. The positions currently
29 are up to four years we've provided funding. I don't
30 know how they'll look in the future because we haven't
31 completely drafted what the future looks like, but it
32 will be something similar to what we're doing now.

33
34 CHAIRMAN BROWER: Gordon.

35
36 MR. G. BROWER: I wasn't really going to
37 question about the partnership stuff. I would just
38 like to bring out some other types of things related to
39 fish. Some of these are just from stories. I always
40 wanted to find out about them sometime. One of them is
41 around Pittalukruak. It's an inland type of a lake.
42 Around Wainwright has the same type of an inlet over
43 there and they fish in the winter time for smelt, like
44 a big smelt fishery over there, subsistence, and why
45 they're always present over there.

46
47 From stories from old-timers, there's
48 the same kind of condition in Pittalukruak and them
49 old-timers -- my dad called them the old-timers, folks
50 that were there back then, the Anatuks and around that

1 Alaktak area back in the 1930s and they would talk
2 about their fishing in Pittalukruak for smelt. I was
3 wondering if that was a spawning area for smelt as well
4 and for fishing. People don't really fish for the
5 smelt there, but it's just some handed-down traditional
6 knowledge that there was a heavy presence of smelt for
7 jigging and fishing over there.

8

9 With leasing and potential oil and gas
10 activities in this area, nobody really knows what the
11 actual conditions are even for a baseline information
12 for that area. I always wanted to see if somebody can
13 research that. I think if it was revitalized with
14 information what goes on there, I would be jigging over
15 there all the time. I've always wanted to go to just
16 prove some of the stories. The same kind of thing with
17 the lakes around....

18

19 (Telephone disconnect)

20

21 MS. PATTON: Mr. Chair, if I may check
22 in. Are you able to hear me? This is Eva speaking.

23

24 (No comments)

25

26 CHAIRMAN BROWER: Continue, Gordon.

27

28 MR. G. BROWER: I always wonder about
29 these things and from old stories again from use of
30 lakes around Teshekpuk. Going a little bit south of
31 those there's a bunch of lakes that are interconnected,
32 kind of like landlocked. The presence of a fish called
33 pakaluk (ph) and he said they're abundant there and he
34 would describe them and to the point where he was
35 frustrated, he wanted to show me. So.....

36

37 (Teleconference interruption)

38

39 MR. G. BROWER: Okay. Well, anyway,
40 out of curiosity, my dad, he went to go put nets. We
41 were always going back and forth hauling fish anyway
42 from our main fish camp. So we happened to put nets
43 there and he caught that type of a fish. That was the
44 only one of that type of fish that was caught. This is
45 the old-timers, that it was pakaluk. It was like a --
46 it was a trout, but very, very, very colorful little
47 trout. They don't get very big. They're only about
48 that big. Just out of curiosity and wanting to know
49 they were there. The stories they talk about and he
50 said, yeah, they've got that type of a fish only in

1 those lakes.

2

3 Anyway, out of those things it's always
4 sometimes a fishery that goes unnoticed, but they used
5 in the past. It was a learning experience for me and a
6 resource that's not -- I don't think nobody fishes that
7 anymore in those areas, but they were from Paul Kalmik
8 (ph) and others that knew those areas as their primary
9 fishing areas. They would talk about them.

10

11 Anyway, I just wanted to mention these
12 things because you don't see anybody utilizing those
13 resources but they're there and the status of them to
14 me was just a question, do they come out, do those
15 types stay there all the time.

16

17 Anyway, with that, I don't know where I
18 was going with this, but there needs -- to me, I always
19 wanted to think what about the ilhuagnik that are
20 there, the smelt, and what they do there. The little
21 know -- I think it's unknown or just little tidbits of
22 information about why they're present over there. Just
23 leave it at that.

24

25 CHAIRMAN BROWER: Two of those
26 resources are still there, Gordon. My brother Charlie
27 and I and Wyatt -- I think a year before Wyatt passed
28 away we were over there to Admiralty Bay and straight
29 out of Oarlock Island there was a aiawuk (ph), a crack
30 in the Admiralty Bay, and we followed it to where it
31 narrowed and it was near the Oarlock Island. We
32 started out from near Cooper Island with my big track
33 vehicle. We were out on the Admiralty Bay and we were
34 driving and Wyatt was the one that was interested in
35 finding those smelts, so we started following that
36 aiawuk (ph) from Cooper Island and made it all the way
37 up near Oarlock Island and that's where we found the
38 smelt in the narrowest part of that crack, jigging.
39 Man, you couldn't even put the hook down before --
40 before it even touched the water the fish would be
41 jumping out, biting the hook. He had so much fun and
42 he never forgot it. He said we should go back there.
43 We never did. I told your dad about that and he just
44 started smiling. At least you guys did some fishing.
45 I've been trying to find them for how many years.

46

47 The way I learned about it was from
48 Max, Max Uneruk (ph). When he was a young boy, he was
49 the one following his parents, going down near that
50 Pittalukruak area in front of Oarlock Island fishing

1 for those smelts. So I know they're still in there.
2 It's just that people don't have a reason for fishing
3 for them. A long time ago there wasn't that many jobs
4 and people needed to go find fresh food and that was
5 one area they went for finding fish and the lake fish.
6 Some of those -- the real arctic char, the ones that
7 are landlocked, are right across from Paul's house and
8 in that area. There's a couple of lakes by Chipp 2
9 where there's other types of trout.

10

11 I remember we went over there behind
12 Chipp 2, we were in that area and got some pretty good-
13 sized trout. What the heck did they say. That fish
14 was like 49 years old when they took the otolith and
15 aged that fish. Gee whiz, we're eating an old fish,
16 but it sure tastes good. So that's the kind of
17 information I know about those areas. It's just that
18 people don't access them. There's a few people, like
19 you, Gordon, that continue to do the fishing and using
20 the area that have that knowledge, but it's not passed
21 on to where other folks are able to do the fishing for
22 those fish.

23

24 It's pretty interesting when you get to
25 find them because it took us a while. It took us like
26 five hours of drilling holes and making holes along
27 that aiawuk (ph) looking for the fish. We thought we
28 were fishing too deep. We'd try in the mid water, you
29 know, dropping the line all the way to the bottom
30 trying to find them, trying near the surface of the --
31 right close to the bottom of the ice and that's when we
32 found them, right near the surface of that ice. And
33 burbot fishing. That should be happening right now.
34 That's where we go up by PK13 in that area.

35

36 MR. G. BROWER: Mr. Chair.

37

38 CHAIRMAN BROWER: Yes, Gordon.

39

40 MR. G. BROWER: It's just the important
41 stuff, you know. People should talk about these once
42 in a while. I hear it from -- you know, our folks are
43 passed on and there's a few people that they -- you
44 know, they had few people that were talking with them
45 back them. Basically it's almost handed down to --
46 from a person that knew a little bit about it to
47 somebody that didn't know nothing about it and then you
48 continue to talk about it. Like Harry said, those
49 cracks, the fissures that form, I've heard my dad
50 fishing in there and getting them, but he always

1 mentioned that it was an area where it would be a
2 spawning area for these smelts. That's why they hang
3 out so much in these areas.

4
5 Anyway, it's just good to just talk
6 about. When you're talking about fish, other fish
7 stories start to pop up because they're interesting
8 because I love fishing. I fish quite a bit.

9
10 CHAIRMAN BROWER: Thank you, Gordon and
11 James.

12
13 MS. PATTON: Mr. Chair.

14
15 CHAIRMAN BROWER: Yes, Eva.

16
17 MS. PATTON: Sorry to interrupt. We
18 lost our phone connection here again. If we could just
19 have a moment to make sure we can bring Rosemary back
20 online.

21
22 CHAIRMAN BROWER: Okay. Go ahead.

23
24 MS. PATTON: Apologies for the
25 interruption.

26
27 (Connecting to teleconference)

28
29 CHAIRMAN BROWER: We're still on the
30 discussion on the Partners for Fisheries Monitoring and
31 which partners can be eligible for seeking assistance
32 from the Office of Subsistence Management in regards to
33 fisheries monitoring. If there's no other comments or
34 questions. James, did you answer your question
35 already? Gordon started talking about fish and I got
36 sidetracked.

37
38 (Laughter)

39
40 CHAIRMAN BROWER: If you did, Karen, we
41 can continue wherever we left off.

42
43 MS. HYER: Mr. Chairman. Council
44 members. That's all I had. Next you'll be hearing
45 from Brendan about his proposed research. He has a
46 PowerPoint presentation.

47
48 CHAIRMAN BROWER: Okay, Brendan, I'll
49 give you the floor.

50

1 MS. AHTUANGARUAK: Harry, one more
2 comment from Rosemary.
3
4 CHAIRMAN BROWER: Okay, Rosemary, go
5 ahead.
6
7 MS. AHTUANGARUAK: There's been
8 discussions related to Alaska Native Tribal Health
9 Consortium and the local observer project and that's
10 also another area that we need to make sure that we
11 loop in to our process so that we're aware of comments
12 that are being put in that process as well as maybe a
13 source to consider partnering with in this concern that
14 we have over fisheries. Thank you.
15
16 CHAIRMAN BROWER: So Karen's heard what
17 your comments were and then trying to get that Alaska
18 Native Health Consortium involved in part of the
19 situation regarding that fish situation in the Nuiqsut
20 area. I think that's one where we could seek their
21 assistance or involvement in terms of the health,
22 state, edibility and that kind of communications in
23 monitoring that broad whitefish in the Colville River
24 is the one, I think, Rosemary is referring to. Thank
25 you, Rosemary. Like I said, Karen's heard and we'll
26 get something identified and working on that portion.
27
28 Again, we're moving along with our
29 agenda. We have Brendan Scanlon with Alaska Department
30 of Fish and Game that's going to be giving us a
31 presentation on dispersal patterns and ocean
32 distribution of Dolly Varden in the Beaufort Sea using
33 telephone telemetry. I'm joking. Not telephone, it's
34 satellite telemetry.
35
36 MR. NAGEAK: Hello, Dolly.
37
38 (Laughter)
39
40 CHAIRMAN BROWER: Okay, Brendan, James
41 is saying you've got to sing like B.B. King.
42
43 MR. SCANLON: I need Lucille with me.
44 Thank you, Mr. Chairman, and members of the Council.
45
46 CHAIRMAN BROWER: So what did you say
47 about Lucille?
48
49 (Laughter)
50

1 MR. SCANLON: Once again, my name is
2 Brendan Scanlon. I'm the sport fish area biologist for
3 Northwest and North Slope for the Alaska Department of
4 Fish and Game. I live in Fairbanks. My area includes
5 Norton Sound, Kotzebue Sound and all the North Slope.
6 Most of the action these days has been in Unalakleet,
7 Nome and Kotzebue. I haven't been to Barrow before.
8 I've only been on the North Slope just a little bit, so
9 I'm really glad to be here and talk about a new project
10 we'll be starting this summer in Kaktovik.

11
12 For this project I'll talk a little bit
13 about the life history of Dolly Varden first, what we
14 know about the harvest and life history based on old
15 research. What we want to do in this project and then
16 I have an example of a similar project that we did the
17 last two years over on the Wulik River.

18
19 At Fish and Game we've known for a long
20 time that Dolly Varden are an important subsistence
21 resource. We don't have a lot of recent data on
22 harvest, but what we do have suggests that villages in
23 Nuiqsut, Anaktuvuk Pass and Kaktovik harvest about 10-
24 20,000 pounds a year of Dolly Varden. A lot of those
25 fish when they're fished on in marine waters are
26 composed of mixed stocks. They anadromous. They go
27 back out to sea. So when you're gillnetting fish off
28 the coast, you could be catching fish that may have
29 come from as far away as the Sag (Sagavanirktok) or
30 Canadian rivers.

31
32 Dolly Varden is anadromous, like a
33 salmon. They spawn in the fall and they emerge from
34 the gravel in the spring. They live in fresh water
35 typically two to four years before they start their
36 annual migrations out to sea. They feed in the ocean,
37 but they have to come back into fresh water to
38 overwinter. Once they become sexually mature at about
39 seven or eight years old they spawn, but only every
40 other year, but they do go out to the ocean every year
41 to feed. We know from other studies that they can
42 travel long distances in saltwater. On the North
43 Slope, probably the most important drainages are the
44 Ivashak, Hulahula and Kongakut Rivers.

45
46 This is a map -- this is based on what
47 we know from telemetry studies, subsistence surveys and
48 genetic stock identification of the most important
49 rivers on the North Slope. What we don't know is to
50 what degree they mix here on the coast in the

1 summertime and that's what we're going to try to do
2 with this project.

3
4 So based on research that Fish and
5 Wildlife Service, Fish and Game, University has done in
6 the past, we believe that there's about 50-100,000
7 Dolly Varden that go out to sea every summer from North
8 Slope rivers. Most fish overwinter and spawn in the
9 same river, which is a little bit different than what
10 they do in the Kotzebue area where there's quite a bit
11 of interchange between say the Kivalina, the Wulik, the
12 Noatak, the Kobuk and the Buckland Rivers and some
13 rivers in Russia.

14
15 We know that some Dolly Varden from
16 Canadian rivers such as the Babbage and the Firth have
17 been caught as far east as the Colville in the
18 summertime and there's almost no Dolly Varden between
19 Barrow and Point Hope. There's not much for big water
20 that is good suitable spawning or rearing habitat for
21 Dolly Varden.

22
23 What we don't know is where the summer
24 feeding areas are exactly in the Beaufort Sea, what
25 kind of summer migration patterns they make, if Dolly
26 Varden from Alaska move into Canadian waters. That's
27 not true. I just read last night that there is some
28 evidence that they do go over there. But we'd like to
29 find out if summer feeding occurs in the oil and gas
30 lease areas off the coast.

31
32 So this map, the blue oval shows where
33 the oil and gas leases are between Nuiqsut and Canadian
34 border. I'm sure you're all familiar with those.
35 Undoubtedly the Dolly Varden go into these areas, but
36 we'd like to find out if they actually stay there and
37 feed or if they just transition through these areas on
38 the way to other summer feeding grounds.

39
40 So originally we thought that Dolly
41 Varden -- well, we knew they were anadromous. We
42 thought they stayed close to the coast, but tagging
43 studies done in the Kotzebue Sound area back in the
44 late '80s we learned that they can travel quite long
45 distances. In fact, fish that were tagged in the Wulik
46 River near Kivalina, most of them stayed in the
47 Kotzebue Sound area and the Noatak and Kobuk and
48 Buckland Rivers, but some tagged fish were recovered
49 down by Brevig Mission in the Port Clarence area, one
50 was caught near Unalakleet and again two fish went to

1 St. Lawrence Island and three fish went into Russian
2 fresh waters, including these two in the Anadyr River
3 that went quite a ways up, a distance about 1,000 miles
4 from where they were tagged originally.

5
6 MS. HEPA: Did you say that was Dolly
7 Varden?

8
9 MR. SCANLON: Yes. So on this project
10 we prophesized that Dolly Varden that overwinter in
11 North Slope rivers occupy offshore Beaufort Sea in the
12 summer. We want to describe the dispersal of Dollies
13 during the summer feeding season.

14
15 CHAIRMAN BROWER: Taqulik has a
16 question for you.

17
18 MS. HEPA: Can you explain again why
19 you thought there was no good -- it was a good habitat
20 in the Chukchi Sea coast.

21
22 MR. SCANLON: There's not much for
23 large rivers with deep water that Dollies would prefer
24 for spawning and overwintering. A lot of those smaller
25 systems can run dry for periods in the summer and also
26 the saltwater intrusion can go pretty far up some of
27 these rivers, such as the Kuk River by Wainwright.

28
29 So we'd like to use some pop-up
30 satellite archival tags. These tags go on the outside.
31 They measure an archive temperature depth and ambient
32 light intensity every 10 minutes. The ambient light
33 intensity is for us to get an idea based on sunrise and
34 sunset, where the fish travels in the summer. You
35 know, its path while it's out in the ocean.

36
37 What we can do is program the day that
38 we want these tags released from the fish and float to
39 the surface because they're buoyant and an antenna will
40 pop out of the water, shoot that data to satellites.
41 When that tag comes off the fish, we'll know where the
42 fish was in the ocean when the tag came off within
43 about 100 meters.

44
45 It's fisheries independent, meaning we
46 don't rely on these fish to get caught later in
47 subsistence or commercial or sport fishermen, and we
48 don't need to go find these fish with antennas in
49 airplanes.

50

1 The tags we're going to use, originally
2 these tags were really big and were put on whales and
3 sharks and tunas, but the technology has gotten better
4 and the tags we're going to use are made by a company
5 in Maryland. They're about 12 inches long and they
6 weigh 40 grams. The weight is really not an issue
7 because they're buoyant. What we can do is program the
8 dates we want the tag to release from the fish. This
9 is a two-year project. For the first year we're going
10 to stagger some pop-up dates and see how well we do
11 with getting this information. In year two, we'll use
12 this information to fine tune our pop-up dates.

13
14 These tags are great, but they do have
15 some setbacks. One is they cost about \$4,000 a pop, so
16 we can't buy a lot. These tags are still pretty big
17 and we need to tag pretty large Dolly Varden because
18 while weight is not an issue, we don't want the antenna
19 hitting the tail of the fish. The release mechanism
20 only works when it's in saltwater or brackish water.
21 How that works is the battery that's inside the
22 transmitter will send a charge up to the thin wire that
23 holds the tag to the fish. It starts electrolysis and
24 essentially rusts off in about 20 minutes, but it
25 doesn't work if it's in freshwater.

26
27 So what we'd like to do is -- and we
28 haven't finalized this, but we thought we'd start
29 around the Kaktovik Lagoon area using large mesh
30 gillnets since we need to catch large fish. We'd
31 probably start with some chum gear. We'd also bring a
32 beach seine and hook and line.

33
34 We don't want to interfere with
35 subsistence activities going on, so we plan to make at
36 least one trip this spring to Kaktovik to explain the
37 project to people and get some ideas and maybe we can
38 get some people that would want to work with us. We
39 plan to hire a local technician for the time that we're
40 there. But we're still looking for good ideas, when
41 and where to catch fish, particularly big fish, say
42 that are 24 inches or bigger, to put these tags on.

43
44 So we've done this a couple times
45 before and how it works is after we catch the fish we
46 do kind of an initial health assessment to make sure it
47 doesn't have any Saprolegnia or any seal bites or it
48 looks like it's in good health. We'll hold them in a
49 holding pen for a short time and to put the tag on them
50 we put them in this fancy cradle made of ABS pipe that

1 covers the fish's eyes while it's in the cradle and we
2 use these sponges in the water to hold them still and
3 they seem to settle right down.

4
5 The tags going outside of the fish, how
6 we do that is we have this kind of a backpack harness
7 system that gets held to the fish. We use stainless
8 steel wires, two of them, to go to the back of the fish
9 under the dorsal fin that we crimp down and it holds
10 the tag to the fish. There's not much red muscle
11 there. These fish don't hardly bleed at all. Every
12 fish we've tagged we've held into holding pens for one
13 to four hours and they've all looked really good. The
14 tag looks really big and obnoxious, but it seems to
15 work pretty well.

16
17 As you can see, these tags are slightly
18 buoyant, so a lot of the time they'll ride up off the
19 fish, but if the fish is swimming really fast, these
20 tags may lay down and that's why we want to catch large
21 fish to keep the antenna off the tail.

22
23 So to make some assumptions about their
24 movement while they're in saltwater, we're going to
25 look at the pop-up locations. That will tell us where
26 the fish was on a particular day and we'll look at the
27 temperature and depth profiles that the data logger on
28 the fish will transmit to satellites.

29
30 Quickly, I'll just show how this
31 project has worked for us over on the Wulik River near
32 Kivalina. We did a two-year project over there. The
33 Wulik River is probably the most important
34 overwintering area for Dolly Varden in the Kotzebue
35 Sound area. There's sometimes well over 100,000 fish
36 that go in there to overwinter. Many of those from
37 other river systems. There's only about 3-5,000 fish
38 that spawn there every year, so most of these are
39 overwintering, non-spawning fish.

40
41 People in Kivalina are really concerned
42 about them. They depend on them much more than they do
43 salmon. Of course, Red Dog Mine is in the headwaters
44 and they're always really conscious about water quality
45 there.

46
47 CHAIRMAN BROWER: Can you help explain
48 that picture back there.

49
50 MR. SCANLON: Yeah. I took this from a

1 helicopter a few years ago leaning out the door. We
2 were doing our surveys in the fall.

3
4 CHAIRMAN BROWER: I was trying to think
5 if those were mosquitos stuck into a helicopter window
6 or something.

7
8 MR. SCANLON: There's about 4,000 fish
9 there. I figured out -- I circled groups of 10 and 50
10 and then try to -- it's not an exact count. Conditions
11 are like this quite often in the fall right before
12 freeze-up. With a helicopter we can do a pretty good
13 job at counting the overwintering fish.

14
15 CHAIRMAN BROWER: Thank you.

16
17 MR. SCANLON: Uh-huh. So for that
18 project we were funded by the Coastal Marine Institute
19 and specifically they wanted to know if the Dolly
20 Varden spent time out in the Chukchi Sea in the summer,
21 particularly if they went to the oil and gas lease
22 areas between Point Hope and Wainwright.

23
24 So over two years we tagged 52 fish
25 with these tags ranging from 30 to 38 inches long.
26 I'll just quickly go over the results based on pop-up
27 locations. This is where we tagged them in the Wulik
28 River and over the next two years this is where these
29 fish ended up. Now the tags don't come off the fish
30 while they're in freshwater, but in the case of these
31 Upper Noatak fish and Upper Wulik fish, they were
32 probably spawners that were in shallow enough water
33 that the antenna popped up out of the water long enough
34 for us to get a location. We didn't get very much in
35 terms of temperature and depth data, but we did get
36 some information even though they were in freshwater.

37
38 A couple fish were caught near Kotzebue
39 in commercial and subsistence fisheries. One ended up
40 in the Buckland River, but the real interesting fish
41 are these over here that went over to the Russian
42 Chukchi side. I'll just talk about them just briefly.
43 So the temperature and depth data looks like this.
44 What we found was there was basically three patterns of
45 movement in these fish.

46
47 First is the river residency. This is
48 the period of time from when we tagged the fish to when
49 it actually went out to the ocean. You can see just
50 during that brief period the depth creeps down just a

1 tiny bit as it's moving downriver and so does the
2 temperature.

3
4 Right here we believe this is the ocean
5 entry period where it went under the shore-fast ice
6 right there in Kivalina Lagoon. It didn't like it.
7 It's water that's slightly below zero. It's a lethal
8 temperature for them, so this fish in particular swam
9 out of here really fast.

10
11 We call this marine transit where the
12 fish's depth doesn't oscillate very much and then
13 marine feeding where it appears to do a lot of diving.
14 This is a little finer scale of what we call marine
15 transit. You can see it came out of the river, it swam
16 down, grabbed a shrimp, and then just stayed real close
17 to the surface for several days. This is more of a
18 fine scale of marine feeding. This is just one day in
19 15-minute intervals and you could see the fish dove
20 from the surface down to about 15 meters almost
21 constantly and spent a couple hours in the afternoon on
22 the surface and continued to do this again. This fish
23 did this for 50 days.

24
25 MS. HEPA: You mean at the surface of
26 the water?

27
28 MR. SCANLON: Yeah, it came right up
29 close to the surface and dove and came back up and went
30 back down. You can see the line below it is the
31 temperature that corresponds to when it dove into
32 cooler waters.

33
34 So the fish that went out to the
35 Russian Chukchi Sea typically spent most their time in
36 the top 15 meters of water. Some fish dove down to
37 almost 30 meters pushing 90 feet of water. So they
38 didn't go to the bottom. It's pretty uniform 150 to
39 200 feet deep out there, so they dove but they didn't
40 go all the way to the bottom. So they probably weren't
41 eating things that live on the bottom.

42
43 This is a map of the currents that
44 happen in the North Pacific and those Russian Chukchi
45 fish ended up really close to this location where the
46 Siberian Coastal Current runs into the current that
47 comes up through the Bering Sea, so warm water and cold
48 water hit each other and mix together and a lot of
49 primary production probably happens there with
50 zooplankton and isopods and amphipods. This is also an

1 important feeding area for beluga -- I'm sorry, bowhead
2 whales in the summer.

3
4 So on this project we used temperature
5 that went just below zero as a proxy for ocean entry.
6 This Kaktovik project we're going to tag them in
7 saltwater so we won't have that to deal with.

8
9 So all four of those fish I just
10 described that went to the Chukchi Sea stayed in the
11 river for about two more weeks after we tagged them and
12 they got to this area in the Russian Chukchi pretty
13 quickly. One fish got there in five days. It's 70
14 kilometers a day to get to where the pop-up location
15 was. If you think about swimming speed of a fish, when
16 they're traveling, they're moving about one body length
17 per second, so this fish swam at that speed almost
18 constantly for five days until it got there and then it
19 knew right where to go. Once it got there it knew what
20 to do.

21
22 So hopefully the information we get
23 from this Kaktovik project is important to subsistence
24 fishers and managers and energy developers since they
25 spend a lot of time near the surface. You know, oil
26 floats so that's something we want to be aware of in
27 case of accidents that potentially Dolly Varden could
28 be impacted. Also there's increased chance of shipping
29 that's going to go through the Northwest Passage in the
30 future.

31
32 So hopefully we find out where the
33 critical feeding habitats are for Dolly Varden that
34 overwinter in the North Slope. If these fish move into
35 these oil and gas lease areas to feed or if they just
36 transition through them to get to other feeding areas
37 and potentially how much they travel into Canadian
38 waters. We only have 15 tags a year because they cost
39 so much, but we'll be able to make broad inferences,
40 but we'll learn a whole lot. The ocean life cycle has
41 always been the black box for Dolly Varden. We haven't
42 been able to learn too much, but with these tags
43 hopefully we will.

44
45 That's all I have. I'll take some
46 questions if you've got some.

47
48 CHAIRMAN BROWER: I've got my notepad
49 and I've been writing lots of questions. And we thank
50 you for your presentation. I'll ask the Council

1 members to see if they have any questions regarding the
2 presentation you just heard. James.

3
4 MR. NAGEAK: Yeah, I notice on the
5 presentation that you wanted to know where the location
6 of the fish are and as I learned the Western culture,
7 that's one of the things that you try not to tell
8 anybody is where the fish are.

9
10 (Laughter)

11
12 MR. NAGEAK: That's my traditional
13 knowledge where the fish are so I can sustain myself.
14 The other thing that I wanted to make known is that we
15 have a place at Anaktuvuk River at the very end of the
16 -- pretty much at the very end of the river is what we
17 call the Pittaluich. That's a place name. It's
18 Pittaluich. In the wintertime, you could get your
19 fishing line and catch one and go home and eat it, you
20 know, and they're Dolly Varden and they winter there.
21 We usually see them because there's a really shallow
22 creek that they call Pittaluich. I won't tell you
23 where it is because of my knowledge of where the fish
24 are. So they do winter up there.

25
26 MR. SCANLON: You're absolutely right.
27 I can't pronounce that, but I think I've heard of that
28 location. We call it the Anaktuvuk char hole. We've
29 had some radio-tagged fish go up there.

30
31 MR. NAGEAK: You're giving out personal
32 data, you know.

33
34 (Laughter)

35
36 MR. SCANLON: I'm working on it. But
37 your first question is, it's not my money, we don't
38 have any secrets. I'm going to do the best I can to
39 let you know how the project is going, what the results
40 are. This will be published in a couple different
41 ways. It will be available any time.

42
43 In the study we did on the Wulik River,
44 we worked and lived in Kivalina for several days and
45 that was a great experience. They were really
46 interested and helpful. They learned a lot. I learned
47 a lot about some really nice Native art as well. I'm
48 hoping for a similar experience in Kaktovik with the
49 people there. We get to work with them and they get to
50 work with us.

1 CHAIRMAN BROWER: James.

2

3 MR. NAGEAK: Follow through. Maybe you
4 ought to get a piece of paper to tell the people that
5 you will not disclose the information to anybody
6 outside of your study area.

7

8 (Laughter)

9

10 CHAIRMAN BROWER: You know, James, that
11 kind of brings out a similar concern I'm having in
12 regard to how does this data get used by others in the
13 interpretation of the amount of fishing, where they're
14 going. I'm trying to be careful, but I can't help it.
15 There's this North Pacific Fisheries Management that
16 deals with the ocean and international waters and
17 commercial fishing and they learn about this type of
18 fishing and their movements and their interest piques
19 to move into the Arctic Ocean. Are you looking into
20 maybe trying to minimize or maximize the interest of
21 these potential fisheries that could occur besides
22 subsistence fishing?

23

24 MR. SCANLON: Mr. Chairman. We don't
25 anticipate any management action coming out of the
26 results of this study. We don't think there's a
27 problem with the stock. They are just unknowns in
28 their life history that we'd like to know. Office of
29 Subsistence Management is funding this study, so
30 obviously that's our number one priority. There's
31 already a commercial quota on the books for Dolly
32 Varden on the North Slope. There's never been much
33 interest or a market. It's very small. There was a
34 whitefish commercial fishery for a while on the
35 Colville. I'm sure you're familiar with that one. I
36 don't foresee any rush to come up here to fish for
37 Dollies commercially. There's not that many. I mean
38 it's not like pink salmon in Southeast or anything like
39 that.

40

41 These kind of studies -- I heard
42 earlier you were concerned that we would use results of
43 these projects to make it harder to subsistence fish
44 and provide more regulations. That's not the purpose
45 of these studies. We do the best job and we get the
46 best information and this helps us learn a whole lot
47 more about the ecology of the Dolly Varden in the
48 summer.

49

50 CHAIRMAN BROWER: I think you're going

1 to find them out there because I've seen them out there
2 in large scales conducting another type of hunting,
3 oogruk hunting out in the ocean following the ice edge
4 and seeing large pods of fish in the ocean. Wish we
5 had a net, but didn't. You know, they're near the
6 surface in three to ten feet deep. It's full of fish
7 out there and we seen them at different stages and
8 distances offshore. So they're out there.

9

10 I just never really liked to speak
11 about them because other folks looking for
12 commercialized products could just come and start
13 interrupting with our activities, doing our subsistence
14 here for other resources. There's information out
15 there. You know, we've had our different observations
16 over time.

17

18 The folks from Barrow, when they were
19 doing the dredging out here, they created a big hole
20 over here in front of the gravel pit, what we call our
21 gravel pit, for access to that dredge to be able to
22 come back to shore to refurbish the dredge materials
23 and move back out. These fish were coming into that
24 hole and there were people fishing out of that hole
25 like they've never done any fishing before. It really
26 was funny to watch all these people. They were all
27 banked up in this little area. Hey, get your line off
28 my fish. That kind of stuff was happening around that
29 little hole down there. There was hardly any parking.

30

31

32 Once the dredging quit and that little
33 slough or that access for that dredge got closed up,
34 the fishing basically ceased again. There's been a
35 question if that area is going to get dredged again or
36 not. I have no idea, but these are the things that we
37 know about and what happens when you open up an inlet
38 or a little area for fish to swim in and it becomes a
39 big fishing hole.

40

41 These other sites at Admiralty Bay and
42 going down to Smith Bay and Harrison Bay, we see them
43 inside those bays. When you get into the transition
44 zone is that very turbulent brown, murky water and then
45 you get into the ocean there's this real clear water,
46 just like what you're seeing in your picture, but it's
47 not that shallow. The thing is, it's like 100 feet
48 deep and you can't see the bottom, but you could see
49 fairly well maybe 35, 40 feet. I seen fish swimming of
50 different types and I always thought, man, we should

1 have brought a gillnet here. But, you know, I still
2 haven't and we get the fish that we need in terms of
3 our subsistence fish, subsistence species.

4
5 But it's interesting in terms of the
6 movement, you know. The ones that you tagged down in
7 the Wulik area and moving into the Russian coast, it
8 kind of reminds me of some of our patterns of what
9 learned on the seal tagging and the beluga tagging. It
10 gives an indication there's going to be some surprising
11 for these fish. The ones from the Wulik area are going
12 to have this certain range and then once you learn from
13 your tagging about the fish that get taken in the
14 Kaktovik into the Beaufort Sea and maybe into Canada.

15
16 That's the kind of information you're
17 probably going to learn about in terms of how these
18 things are moving. I'm not going to say I knew about
19 this stuff, but I think that's what's going to happen
20 because we seen and learn from the different resources
21 that movement patterns in the arctic going to our
22 neighboring countries, Russia and Canadian, so we know
23 about the movements and the use of those fish.

24
25 I mean I could share with you some more
26 about fish stories like Gordon. We get into fish
27 discussions and these are the things that we are very
28 interested in. Dolly Varden, we don't have the dog
29 teams anymore, and it was one of the fish along with
30 the salmon, dog salmon and other salmon species that
31 got taken for dog food. The other types of fish like
32 the broad whitefish we used for subsistence food
33 basically.

34
35 These are the things that I learned
36 from my father and my uncles that we communicated about
37 where to go fishing and how much fishing to do. He'd
38 say I don't have to catch as many as I used to.
39 Because it was a lot of work when you had the dog teams
40 and they had to get different resources for dog food.
41 So regulations changed things and they had to resort to
42 other resources to provide for the means that they had
43 at the time. With that means of access changing and
44 our mode of transportation change, it's a little bit
45 less, but those species and fisheries are still there.
46 You know, it's just the shifting to burning more
47 gasoline and using snowmachines and broken parts.

48
49 Anyway, I thought I'd share that.
50 These are very interesting. Again, I'd like to see the

1 results once you learn more about your tagging project
2 in the Kaktovik area. I'm not sure if you're looking
3 to provide some of this information to the North Slope
4 Borough Fish and Game Management Committee. They're
5 another group that we deal with with all our resources
6 there on the North Slope. I think it would be a good
7 opportunity. And get some input from the folks from
8 Kaktovik. We have representation in these groups that
9 could help communicate with you and identify potential
10 candidates to work with when you're in Kaktovik.

11
12 MR. SCANLON: Thank you. We plan to do
13 that with people in Kaktovik and share results with
14 you. Hopefully next spring I can come back to this
15 meeting and let you know how we did this summer and
16 what we want to do next summer.

17
18 CHAIRMAN BROWER: Any other questions
19 to Brandon from the Council members or others.

20
21 MR. G. BROWER: Maybe one.

22
23 CHAIRMAN BROWER: Gordon.

24
25 MR. G. BROWER: In terms of getting
26 started for a study like that, was it a request from
27 communities that had expressed a concern or was it
28 something you wanted to understand more of this
29 particular resource in itself, whether or not it was
30 connected to different countries other than just this
31 Alaska area and what are your plans going forward with
32 the same types of studies but with different species?

33
34 I was always wondering about what was
35 going on with salmon in the Chipp River. There's a
36 period of time on that river where there's a lot of
37 salmon. You know, those humpies. Whether they're
38 actually spawning there or if it's just a -- it happens
39 every year, so I think they do come in there to find a
40 place to put eggs down, but it's like in July and June.
41 And then the spawning for the whitefish is late
42 September and the first week in October.

43
44 MR. SCANLON: Thank you. The idea
45 behind this project had to do with how successful we
46 were on the Wulik River project. While Dolly Varden
47 were not a priority information need for this round of
48 proposals with OSM, we've known for a long time it's
49 been an important subsistence fish. It's probably the
50 one fish large enough to handle these tags up here, so

1 that's part of it. The technology hasn't caught up to
2 where they're small enough to put on a broad whitefish.
3 We hopefully can do that someday as well.

4
5 There is Canadians -- the Department of
6 Fisheries and Oceans and Northwest Territories are
7 going to try this same study with the Dolly Varden
8 there. Hopefully we'll get together and be able to
9 show where there fish went, our fish went and how small
10 a world it is and, you know, share the same pot of fish
11 between two different countries.

12
13 The salmon projects and whitefish
14 projects, there is some work going on right now within
15 Fish and Game, specifically Habitat Division has been
16 trying to do some telemetry on the Colville and maybe
17 not the Chipp, but I think maybe the Meade River to get
18 an idea of the timing and spawning locations for some
19 of these salmon. They're not having great luck. It
20 seems to be kind of real hit or miss. Some years
21 there's zero and some years there's several hundred
22 pinks.

23
24 There's a very large project going on
25 near Wainwright right now, Mr. Shears. The telemetry
26 of grayling, burbots, broad whitefish. They're
27 learning a whole lot about how these seasonally
28 connected lakes and streams, how important they are to
29 summer feeding and rearing. If that's something you
30 would like some more information on, I could get that
31 to you.

32
33 CHAIRMAN BROWER: I think that would be
34 of interest to our Council members. They're not
35 currently present. They've got other prior commitments
36 that keep them from walking in and walking out of these
37 meetings. I think Bob and his constituents will
38 probably show interest in terms of what you learn from
39 the Wainwright area. Not just from Wainwright. Point
40 Lay and Point Hope as well.

41
42 I kind of feel sorry for these guys
43 that miss out on this information because there's
44 things that we just can't control, like a death in the
45 village, to keep our members from arriving. They could
46 have showed some interest in terms of how -- from the
47 information you provide. Just the luck of the draw in
48 terms of how we proceed.

49
50 Any other questions or comments. One

1 came up and I started talking and I lost my train of
2 thought again. Anyway, I'll stop here and ask Council
3 members or others if they may have any questions to
4 Brendan in regards to the presentation.

5
6 MS. AHTUANGARUAK: Harry, this is
7 Rosemary.

8
9 CHAIRMAN BROWER: Yes, Rosemary.
10

11 MS. AHTUANGARUAK: I got an email today
12 from the Native Village of Nuiqsut and they just passed
13 a resolution calling for halt of all scientific studies
14 due to their continued impacts on subsistence. I've
15 got a copy in my email. I can forward it to you guys
16 if you -- actually I could send it up to Eva. But
17 that's important on all of our topics that we've
18 discussed yesterday and today on these issues. Thank
19 you.

20
21 CHAIRMAN BROWER: I think if you could
22 share that that would be helpful. If we don't know
23 anything about these types of things we may be working
24 against our own constituents as to what they're wanting
25 to stop or understand more of the type of research
26 that's occurring.

27
28 Gordon.
29

30 MR. G. BROWER: Mr. Chair. I was a
31 recipient of two different letters, one that was just
32 being described. I think it was primarily because of
33 aircraft use. It wasn't about studies in general, but
34 the interference with subsistence activities and the
35 aircraft activities associated with them. So it might
36 be very interesting to look at that to minimize the
37 impacts. I kind of read through it as much as I could
38 and I got the perception it was an impact-driven
39 letter.

40
41 CHAIRMAN BROWER: Thank you for sharing
42 that, Gordon. Again, not knowing the full contents of
43 the concerns within the letter itself, it's a little
44 bit hard to perceive things and try to continue moving
45 forward with the concerns.

46
47 Anyway, Brandon, did you have a
48 response you wanted to provide.

49
50 BRENDAN SCANLON: Just briefly

1 regarding the aircraft. Right now our plan is to come
2 in on a regularly scheduled commercial flight to
3 Kaktovik and use small rubber boats. We only need 15
4 fish. We don't plan to be there any longer than we
5 need to be. The results of this project, if they're
6 successful, can only help subsistence we believe. My
7 experience with the Kivalina folks was great and I
8 think we taught them things and they taught me things.
9 I'm hoping for the same experience in Kaktovik.

10

11 CHAIRMAN BROWER: Communication is
12 always the key. Once you get the footing into the door
13 and communicating basically the best approach you could
14 take in getting the community involved. Taqulik, did
15 you have a comment. If you could come up to the mic,
16 please. Sorry.

17

18 MS. HEPA: This is Taqulik Hepa. I
19 just had one question on your earlier slide. You said
20 between 10-15,000 pounds of fish. How many fish would
21 that be? You were showing numbers of 50-100,000.
22 Just curious.

23

24 MR. SCANLON: The subsistence harvest,
25 I don't have that in front of me. I believe it's four
26 pounds. In that study they considered the average size
27 of the fish. So 15,000 pounds at four pounds a fish is
28 3,500 or 4,000 fish a year. It's not a huge number.

29

30 MS. HEPA: Just curious.

31

32 MR. SCANLON: That's a good question.

33

34 CHAIRMAN BROWER: Good luck for you in
35 communicating. Like I said, I hope you get
36 communicating with the North Slope Fish and Game
37 Management Committee and there's representation from
38 the village as well. Communicating with them would
39 probably be a good thing in gaining the support of your
40 research.

41

42 MR. SCANLON: Thank you very much, Mr.
43 Brower. I'll do my best and please contact me any time
44 if you have questions or concerns or suggestions. Just
45 one quick thing. We'd really like to get these tags
46 back, so there's going to be a reward for it. It will
47 be substantial. It will be 20 gallons of gas or
48 something like that. If we refurbish them, it's only
49 \$900 as opposed to \$4,000. We'll get the word out on
50 the tag recovery as well.

1 CHAIRMAN BROWER: I was going to say
2 that if there's going to be a reward, I would like to
3 see about the equal amount of the reward being given
4 for how much you spend for the tag.

5
6 (Laughter)

7
8 CHAIRMAN BROWER: Thank you, Brandon.
9 Thank you, everyone. Eva, you have to help me read
10 your handwriting. Can you help me identify what next
11 one we're on. How's the Council members feeling?
12 Continue with our agenda item or do we need a break?

13
14 MR. G. BROWER: Mr. Chair.

15
16 CHAIRMAN BROWER: Yes, Gordon.

17
18 MR. G. BROWER: I think we should
19 continue. Just try to get things done, I think.

20
21 CHAIRMAN BROWER: Okay. Our next
22 agenda item is under new business. Review and approve
23 draft 2013 annual report. I think this is an action
24 item. Eva.

25
26 MS. PATTON: Mr. Chair and Council.
27 You have before you the Council's annual report to the
28 Federal Subsistence Board. The intention of this
29 annual report is to bring subsistence concerns and
30 knowledge and any programmatic or regulatory concerns
31 to the awareness of the Federal Subsistence Board.
32 This is the annual report based on the Council's
33 feedback at meetings and discussions that was sent to
34 you via email and the same one that we reviewed on
35 Tuesday when we gathered here. So if there are any
36 edits or additional information, any changes the
37 Council would like to see to this annual report, at
38 this time is the opportunity to make any of those
39 recommended changes and then final approval of the
40 report to be drafted, which will come back to you in
41 its final form for one last review before being sent on
42 to the Board. Thank you.

43
44 Rosemary, this is the same annual
45 report that was sent to you via email and also the same
46 copy that we reviewed on Tuesday if you have that
47 available or would you like me to touch on some of the
48 topics?

49
50 MS. AHTUANGARUAK: I have it, Eva.

1 MS. PATTON: Okay. Thank you.
2
3 MS. AHTUANGARUAK: Do we need a motion
4 to consider it for approval or open it for discussion
5 or to discuss an addition?
6
7 CHAIRMAN BROWER: Yes. It's an action
8 item. Yes, put it in the form of a motion, please.
9
10 MS. AHTUANGARUAK: Yes, I'd like to
11 make a motion to approve the annual report for
12 discussion.
13
14 MR. G. BROWER: Second.
15
16 CHAIRMAN BROWER: Seconded by Gordon.
17 Any further discussion.
18
19 MS. AHTUANGARUAK: I just want to make
20 sure that we characterize the concerns of the fisheries
21 issues into the report so we can have all of this
22 information in there. Thank you.
23
24 CHAIRMAN BROWER: Okay. We got the nod
25 from our staff. She's indicating that we'll get that
26 into the report.
27
28 MS. PATTON: Uh-huh.
29
30 CHAIRMAN BROWER: Any further
31 discussion on the annual report.
32
33 MR. NAGEAK: Mr. Chair.
34
35 CHAIRMAN BROWER: Yes, James.
36
37 MR. NAGEAK: Are we on the discussion
38 part?
39
40 CHAIRMAN BROWER: Yes.
41
42 MR. NAGEAK: I just looked up the word
43 for apprised. I couldn't find it in my dictionary.
44 One day meetings are completely inadequate for the
45 Council to be able to convene, share information with
46 each other to be apprised of subsistence knowledge.
47 Shouldn't that be appraised?
48
49 MS. PATTON: Mr. Chair, James. I can
50 change the wording on that to be informed or another

1 word that would work better there.
2
3 MR. NAGEAK: The correct word then is
4 appraised on the letter?
5
6 MS. PATTON: Yes, or we can use
7 informed. It's to be informed. You're my professor,
8 so whatever recommendation you have on the edits I'll
9 make those changes.
10
11 MR. NAGEAK: I thought maybe appraised
12 might have been -- the definition for appraised is one
13 who estimates officially the worth or value or quality
14 of things. I thought maybe that's the -- I don't know.
15 I'm just curious. I might be wrong. Okay.
16
17 MS. PATTON: Mr. Chair. Sure, I can
18 make that change and the letter will come back to you
19 after your recommended edits for final review again.
20
21 CHAIRMAN BROWER: Any further
22 discussion.
23
24 (No comments)
25
26 MR. NAGEAK: I call for the question.
27
28 CHAIRMAN BROWER: The question has been
29 called on the motion to approve the 2013 annual report.
30 All in favor of the motion signify by saying aye.
31
32 IN UNISON: Aye.
33
34 CHAIRMAN BROWER: Opposed say nay.
35
36 (No opposing votes)
37
38 CHAIRMAN BROWER: None noted. Thank
39 you. The 2013 annual report has been approved. The
40 next agenda item is the tribal consultation
41 implementation and ANCSA consultation policy.
42
43 MS. PATTON: Mr. Chair and Council. Do
44 we have Jack Lorrigan on the line.
45
46 CHAIRMAN BROWER: Jeff?
47
48 MS. PATTON: Jack Lorrigan is the Native
49 liaison for the Office of Subsistence Management. He's
50 been one of the lead people in working with the tribal

1 consultation working group to draft these
2 implementation guidelines. Are you online, Jack?

3

4 MR. LORRIGAN: Yes, I am.

5

6 MS. PATTON: You're a little warbled,
7 but we can hear you. Jack can give a brief overview of
8 the timeline and, of course, Rosemary Ahtuanguaruak has
9 been one of the working group members. You'll find in
10 your meeting book starting on Page 56 is the brief
11 ANCSA Consultation Policy and then 58 are the
12 implementation guidelines. Again, tribal consultation
13 has long since been in place for government-to-
14 government consultation and these implementation
15 guidelines are to help facilitate tribal consultation
16 in connection with the Regional Advisory Council
17 process.

18

19 CHAIRMAN BROWER: We'll give you the
20 floor, Jack.

21

22 MR. LORRIGAN: Can you hear me, Mr.
23 Chairman? Hello?

24

25 CHAIRMAN BROWER: Yeah, go ahead, Jack.

26

27 MR. LORRIGAN: Thank you, Mr. Chairman.
28 Eva covered a lot of the introduction. The
29 implementation guidelines draft before you on Page 58
30 is the result of a group (indiscernible) and several
31 others were on it. So we're going to send it out to
32 the RACs and we're sending it to the tribes and also
33 the draft ANCSA Corporation Policy that starts on Page
34 67. The RAC and tribal corporation review are due
35 March 21st. We'd like to have feedback from that part
36 of the process with the target audience be done so we
37 can have the edits ready and done before we go to the
38 Board in April for their Board meeting. So this is an
39 action item for all the RACs. We hope you guys can
40 take a look at it, read through it and give us any
41 changes you feel should be made or additions. It's
42 before you now.

43

44 CHAIRMAN BROWER: Thank you, Jack.
45 Rosemary, would you like to chime in in regards to the
46 discussion of the tribal consultation draft
47 implementation guidelines.

48

49 MS. AHTUANGARUAK: This process has
50 been gone over the last many months. We've had

1 teleconferences with a number of tribal and corporate
2 participants discussing this process. We presented
3 some of the progress to the Federal Subsistence Board
4 in January and there's still additional work to do. We
5 didn't want to rush the process. We have a lot of
6 tribes and corporations that are depending on this to
7 turn out to be a good document. So we allowed
8 ourselves some additional time to make sure that we
9 have time to get the responses back and we'll take that
10 process and continue on with our attempts to complete
11 this document.

12
13 CHAIRMAN BROWER: Council members,
14 comments. We don't have to take any action -- take it
15 as an action item at this time. It's just
16 informational material for you to review and get
17 involved in terms of the progression on the tribal
18 consultation.

19
20 MS. PATTON: Mr. Chair. That's
21 correct. Unless any of the Council members have ideas
22 or recommendations that you see. It's an update on the
23 process and the timeline and this goes back to the
24 Board. As Rosemary indicated, the tribes continue to
25 work on this document as well, but the Council is
26 welcome to make any comments or recommendations if you
27 wish.

28
29 MR. NAGEAK: Mr. Chair.

30
31 CHAIRMAN BROWER: Yes, James.

32
33 MR. NAGEAK: There's a lot of
34 information here. This is the first time I've seen
35 this. How much time -- when is this going to be
36 implemented by the Federal Subsistence Board?

37
38 MR. LORRIGAN: Mr. Chairman.

39
40 CHAIRMAN BROWER: Yes, go ahead, Jack.

41
42 MR. LORRIGAN: We are asking for a
43 March 21st deadline for the tribes. We could also
44 leave that up to you as well. We'd like to have
45 feedback back in time to incorporate the edits and get
46 it before the Board at the April meeting. If you wish
47 to you're welcome to do that to. It's information for
48 you to help us act on this.

49
50 CHAIRMAN BROWER: So Jack indicated

1 March 21, 2014 is basically the last date. A month
2 away.

3
4 MR. NAGEAK: Our representative,
5 Rosemary, is -- you know, we work on representation and
6 she is, I guess, representing us in this particular.
7 So, with that knowledge -- I would read it, but I think
8 if Rosemary feels it's adequate or needs to be
9 apprised, then I'm good with it.

10
11 CHAIRMAN BROWER: All right. Any other
12 comments.

13
14 (No comments)

15
16 CHAIRMAN BROWER: If not, thank you,
17 Council members. Eva, we can move on to our next
18 agenda item.

19
20 MS. PATTON: Mr. Chair. Thank you,
21 Jack, for your presentation.

22
23 CHAIRMAN BROWER: Yes, thank you, Jack.

24
25 MR. LORRIGAN: Thank you, Mr. Chair.

26
27 MS. PATTON: The tribal councils too
28 that you are a part of and the public tribal members
29 from your community do have an opportunity to review
30 and weigh in on this as well, so that's open as well.

31
32 Next on the agenda is the Council
33 nominations process and outreach. We have a couple
34 updates on the current nominations process. As we had
35 discussed on Tuesday and yesterday, the Secretary's
36 Office is delayed in making final vetting and final
37 appointments for nearly all of the Councils at this
38 time, so we are still waiting on a final word for an
39 appointment to this Council. As soon as we are aware,
40 we'll let the Council know.

41
42 We do have a letter from the Western
43 Interior Regional Advisory Council addressing the
44 Secretary of the Interior, making some requests and
45 recommendations for changes to the process. Currently
46 the seats expire on December 3rd, so appointments are
47 supposed to be made by December 2nd so that there isn't
48 a lapse in the seats. Most of the appointments are
49 staggered. There was a recommendation, and I'll pass
50 this letter out, from the Western Interior Council if

1 perhaps that could be changed so that seated members
2 continue to be a representation on the Council until a
3 new appointment is made. So it would prevent this sort
4 of lapse in membership if the Secretary's Office was
5 delayed again in the future.

6

7 CHAIRMAN BROWER: Comment. So, do we
8 get double time for -- double in pay for doing dual
9 work because other members are not here?

10

11 (Laughter)

12

13 MR. NAGEAK: Mr. Chair.

14

15 CHAIRMAN BROWER: Yes, James.

16

17 MR. NAGEAK: I have a question. Some
18 of the appointments I get into are community sanctioned
19 and I'm wondering whether my community of Anaktuvuk
20 Pass would have to be apprised of my intention to apply
21 again for this Rural Advisory Council.

22

23 MS. PATTON: Mr. Chair and Council.
24 Definitely -- I mean part of the process and part of
25 the recommendation is those references from your
26 community. In many cases, the Council has been helpful
27 -- one of the Council's concerns is lack of
28 representation from Nuiqsut, from Atqasuk, from Point
29 Lay. That sort of networking and the recommendations
30 made by those communities to nominate people within
31 their community who would be good representation for
32 the community and for the region and are knowledgeable
33 subsistence hunters and fishers and good elders in
34 leadership in their community or younger folks as well
35 who are engaged in subsistence and learning.

36

37 So it's up to your community.
38 Certainly the recommendations you were asking about
39 earlier either from your village council or your tribal
40 council, other elders, subsistence fishers. So those
41 come in to play in the references and the application
42 process. Certainly your own engagement in the
43 community is really important for your representation
44 on this Council.

45

46 MR. NAGEAK: Mr. Chair.

47

48 CHAIRMAN BROWER: Yes, James.

49

50 MR. NAGEAK: There's a modification on

1 my part because I'm also on the Subsistence Resource
2 Commission for the National Park Service and that
3 particular position is sanctioned by the Regional
4 Advisory Council. So with those things in mind, I'm
5 asking this question.

6

7

CHAIRMAN BROWER: Eva.

8

9

10 absolutely, James. That's a very important part of
11 your representation on this Council and the overlapping
12 roles of the National Park Service representation as
13 well. So you serve both those roles and they're
14 interconnected. It is this Regional Advisory Council
15 that makes that recommendation for representation on
16 the Park Service SRC. So your continuation on both of
17 those is interconnected.

18

19

20 Marcy Okada was online as well. As you
21 know, she works with the subsistence SRC. It's the
22 next year because your appointment in that SRC is
23 continuing on, but this is the juncture that you would
24 reapply for the Regional Advisory Council.

25

26

27 MR. NAGEAK: So the person that needs
28 to be my reference would be from the SRC then because
29 I'm a representative from here to be to that one. I
30 better say to Doug that if you want me on this part of
31 the SRC for the National Park Service, then you better
32 make a good reference for me then.

33

34

(Laughter)

35

36

37 MS. PATTON: Yes. Mr. Chair. Sure.
38 Yes, they are interconnected and it is a lot of
39 responsibility. But absolutely. And that falls into
40 the application process, as you're familiar with the
41 other boards and commissions and involvement in
42 subsistence. So it's recognized that you fulfill this
43 role on the SRC when you put that in your application.
44 If you would like to have a reference from the people
45 that oversee
46 that SRC, that would be great as well. Thank you.

47

48

MR. NAGEAK: I understand now.

49

50

CHAIRMAN BROWER: So, James, they need

to develop a hat with multiple brims.

51

52

(Laughter)

1 MR. NAGEAK: And a luxurious position
2 too.
3
4 CHAIRMAN BROWER: Thank you, James.
5 Gordon.
6
7 MS. AHTUANGARUAK: (Indiscernible) in
8 this role. Thanks.
9
10 CHAIRMAN BROWER: Thank you, Rosemary.
11 Gordon.
12
13 MR. G. BROWER: Mr. Chair. In the same
14 light of -- I think I sit in the same position with
15 James. My seat is expiring this coming December 2014.
16 I am to reapply. I often have those same types of
17 concerns because I'm reapplying. Should somebody be
18 nominating me to reapply? When I first got on the
19 Regional Subsistence Advisory Council, maybe 1998 or
20 somewhere in that timeframe, I was nominated to go on.
21 Somebody highly recommended that you serve in this
22 capacity for your community. Sometimes I get tired.
23 Should I reapply. I'm going on 15-plus years of
24 serving.
25
26 There should be some younger hunters
27 that are seeing different things and interacting out
28 there that should be more encouraged to be on these
29 kind of things. Often I get concerned when you get so
30 many Barrow people and the Council is not
31 differentiating from where you're really from. You're
32 just from Region 10. In the past, it seems like to me
33 we had a representative from each community.
34
35 You live in Nuiqsut, you're going to
36 serve as Nuiqsut's concerns and hear from them. You
37 live in Kaktovik, you're going to hear from Kaktovik
38 and their concerns or from Point Hope. I often thought
39 when we didn't have that type of representation from
40 those communities that have more insight into what
41 problems they're seeing over there that we should go
42 sometimes to these villages and convene this meeting in
43 that village and make them nominate from the floor. I
44 don't know why it's never -- either you don't have
45 money to do it or it's just an afterthought at that
46 point.
47
48 Those were always my remaining
49 concerns. Some of us, we can't -- I like to be on here
50 and express the concerns and what we see out there, but

1 some of the younger folks, I think, that are very, very
2 active should -- people need to nominate those folks as
3 well.

4

5 CHAIRMAN BROWER: Thank you, Gordon.
6 You're right. We did work a lot through our
7 coordinator Barb at the time to try and get to our
8 outlying villages to fill those positions and it was
9 working for a few years, but then the interest of
10 community members seemed to dwindle a bit because of
11 situations we were dealing with. I think that
12 shouldn't slow us down. I keep thinking, you know,
13 conduct more outreach.

14

15 I'm starting to think if we should
16 maybe get the Federal OSM to start thinking about
17 working with the school system about getting
18 educational material into the school system regarding
19 the Federal Subsistence Management Program or even the
20 state management program to be fair and honest with
21 educating our younger children in growing up in this
22 lifestyle, which we really don't know about the
23 programs themselves. Even Title VIII of ANILCA. They
24 don't even know what we're talking about when we
25 mention Title VIII. What is Title VIII or what is
26 ANILCA? Those kinds of things are not presented in the
27 school system.

28

29 They're more educated into the Western
30 concept of conducting science, mathematical problems,
31 engineering degrees and that sort of stuff. And into
32 the science field, basic science is introduced. Not so
33 much of what it takes to develop proposals for
34 regulations or reviewing regulations, learning about
35 ANILCA or going through this nomination process. You
36 know, it's something that they could probably learn if
37 there's some kind of outline to be used in the school
38 system educating our own about what it is, this Federal
39 subsistence management program.

40

41 It's not a small book. These things
42 take forever. I mean I still continue to learn after
43 20 years, you know. I have to say it's not one
44 individual. It's multiple agencies with thousands of
45 employees that know all these things and trying to
46 understand it all is very cumbersome and time consuming
47 and continuously learning about different situations
48 because of how our resources are managed by our Federal
49 government.

50

1 When we talk about just the title,
2 Federal Subsistence, it's misleading in the sense that
3 you have to understand what Federal subsistence really
4 means to one of the Federal agencies because they have
5 different mandates, different criteria that they have
6 to adhere to within the Federal program. U.S. Fish and
7 Wildlife Service has one set of criteria. National
8 Park Service has one set of criteria. Arctic National
9 Wildlife Refuge has another set of criteria.

10
11 So those kind of things and they mix
12 and sometimes they want to keep separated. That's the
13 other thing. Why is it that residents of the whole
14 North Slope, why do we have multiple agencies running
15 all these different parks and preserves and refuges and
16 NPR-A? Where did BIA go in all that mix? Bureau of
17 Indian Affairs. They should bring that back on and get
18 a little more vocal in terms of getting the BIA schools
19 back on board maybe in pursuing higher education in
20 that sense.

21
22 Anyway, I'm just shooting off and just
23 sharing some of my thoughts. I think these thoughts
24 need to be shared in ways that elevate the interest of
25 others. We have a lot of outside influence to our
26 state and to the North Slope. There's a lot of come
27 from outside and yet our children just know it by --
28 hear it by name and don't know what's behind all that
29 kind of scene. It's a little bit embarrassing
30 sometimes even to make mention of these things, but
31 these are the facts.

32
33 If there's means through your position,
34 Eva, indicating that there needs to be an outreach,
35 maybe educational outreach indicating going through the
36 school systems in that sense, not educating other
37 people, but through the school system educating the
38 students of how this process really works, you know. I
39 think you'll see the benefits in the long run once you
40 see one or two schoolchildren become interested in
41 science or regulations and regulatory processes and
42 that kind of stuff.

43
44 I mean I think we have one of our own
45 over here, Nicole, political science and that field.
46 So you know that kind of perks up from the interest of
47 individuals in terms of what things are of interest to
48 the individual person. So I've been here in this
49 Regional Advisory Council because I care about how my
50 people are being affected by regulations, which they

1 don't really know or comprehend or even begin to want
2 to follow regulations. I don't. Even though I'm a
3 subsistence hunter and there's regulations, I'm
4 supposed to have hunting licenses. I don't go do that
5 stuff because I'm not the type of person that wants to
6 be doing -- trying to be a law abiding citizen. I even
7 break the own laws for some reason, unknowingly.

8

9 (Laughter)

10

11 MR. G. BROWER: Mr. Chair.

12

13 CHAIRMAN BROWER: Yes, Gordon.

14

15 MR. G. BROWER: Yeah, I think it's very
16 important. I actually talk about these things and
17 nominations and outreach. Outreach is something that I
18 think is lacking. If they knew a little bit more about
19 what goes on from here, you could make recommendations
20 to change regulation that affects your hunting around
21 here.

22

23 I mean I see one here that we made a
24 recommendation on about 156-something.00 west longitude
25 excluding Colville River drainage be changed.
26 Proponents changing the latitude from 156 west to 155
27 west for moose. I look at the folks that are really
28 wanting to follow the law and have to go extraordinary
29 circumstances to harvest a single moose by changing a
30 little bit. The moose really don't come down that often
31 from those areas over there, but one might come down
32 and I might -- not just only me, others, you know,
33 might be struggling for the last three years that I
34 have with caribou in my area and say it's time to take
35 this darn moose, man, and eat it.

36

37 We need to make things, as we see the
38 dynamics change, to try to work. I really don't like
39 when it says the Council recommendation is to support
40 it, contrary to OSM's preliminary recommendation to
41 oppose. Didn't we make the case and talk about it
42 enough that these concerns are real, they're not just
43 something pulling out of a hat, that OSM should
44 support. It's like them versus us and it's their
45 regulation to wield.

46

47 We make the recommendation because
48 we're the boots on the ground. We're the ones impacted
49 to try to make things right, but our conversation is --
50 you know, sending that to the Federal Board of Game to

1 review it in this way with that kind of language, the
2 Council say support it, but contrary to OSM's
3 preliminary recommendation to oppose. Something is
4 wrong right there. We should have convinced OSM. Say,
5 you know, these guys know what they're talking about.
6 We know that the moose was struggling for some time and
7 they're on the rebound and their main habitat they
8 really enjoy is way the heck up there. Once in a great
9 while they come down, one or two.

10

11 By the way, my dad had to go to court a
12 long time ago, it was like 1950-something. He was on
13 the State Board of Game or something like that and he
14 broke his own law and turned himself in and then his
15 sister judged him, Sadie.

16

17 (Laughter)

18

19 MR. G. BROWER: It was a funny story.

20

21 CHAIRMAN BROWER: At least you know how
22 big the families are around here when you have the
23 magistrate and the hunter in one room. Eva, did we
24 have anything else that we're going to cover while
25 we're under this agenda item?

26

27 MS. PATTON: Mr. Chair. No, those are
28 all very, very important points and one that I take
29 very seriously and we have support from OSM. Our new
30 director is very supportive of outreach. Karen Hyer,
31 who is here, and myself do hope to spend some time in
32 the schools. We were also hoping to meet with you,
33 Harry. There was a recommendation from Harry and the
34 Council in terms of trying to help foster a mentorship
35 seat on the Council to bring up younger subsistence
36 hunters and fishers into this process. Rosemary has
37 been very involved in that as well. So that is
38 something we would like to explore further, is your
39 ideas and recommendations for how we might be able to
40 help support that.

41

42 I know many of you have been very
43 involved in helping new outreach or make nominations
44 for people to the Council. I've spend a lot of time
45 talking with tribal representatives and others from the
46 communities that are not represented right now. As
47 you've indicated, Harry, many people wear many, many
48 hats, are very busy. The Council has asked repeatedly
49 to hold these meetings in the villages, in the
50 communities that have specific subsistence concerns

1 that have come before this Council and also those
2 communities that are not currently represented so they
3 have an opportunity to participate and to be engaged.
4 That's in the Council's annual report for this year.

5
6 I think it's a very, very important
7 part of the outreach that you're asking for. Budgets
8 are an issue, but if the Council brings these requests
9 forward, the Subsistence Management Program is
10 established to support the Councils, so these
11 recommendations are very important and we'll bring them
12 back to the office and try to do the best we can in
13 outreach and I'll be talking with all of you as we work
14 through our outreach right now for getting
15 representation from some of these communities that are
16 not here and the younger representation too. So, thank
17 you.

18
19 CHAIRMAN BROWER: Any other comments or
20 questions regarding our nominations. Rosemary, go
21 ahead.

22
23 MS. AHTUANGARUAK: I was in the middle
24 school here in Barrow last week knowing what our
25 village went through and how things can be hard to deal
26 with. It's really good to have us in the schools after
27 things like this for school kids and have it in the
28 things as well as to help support understanding some of
29 the things we're getting.

30
31 So I did an outreach where I offered
32 sweaters, but I went into classrooms and asked them
33 questions like what is the Federal designation to the
34 lands that we live in, what happened in 1989 that led
35 to us having a better process at local community
36 meetings with oil and gas industry. Different
37 questions that helped them understand about the issues
38 that we have and things like that, but it went really
39 well.

40
41 I've been doing this over eight years
42 and it's important for us to be engaged in our future
43 generation's future because people who come here from
44 other areas may have their educational degrees, but
45 without the understanding of our local community and
46 issues that we're facing, it's a different education
47 process. I'll be going back into the schools and doing
48 presentations as well as working with the various
49 processes that are interested in some of these issues
50 as the year goes on and hopefully be able to do a small

1 type of process in the villages this year.

2

3 This type of stuff is what helps to
4 grow our future generations and help in understanding
5 the importance of our process to encourage them to
6 further their education and to bring their education
7 back into our local communities. It's really important
8 for us to be engaged in this process because we bring a
9 different process than it is from someone within the
10 agency that has a different background and a different
11 education about what the Federal Subsistence Program
12 does.

13

14 So I hope that you'll partner with us
15 in the process to do outreach with the schools so that
16 we can also be able to help with this process and to
17 give insight from our perspective on what we're doing.
18 Also, it's very important that we get a process to
19 allow us to grow the next Harry, the next Gordon and
20 the next James as we go through all these different
21 issues. The depth of knowledge that you guys hold is
22 really a vessel of information that does not get
23 brought out if you're not there and it's important that
24 we get the exposure for the generations to be able to
25 understand the knowledge that you have.

26

27 And the generations of participation
28 that have led to where we're at right now with the
29 regulations that we're dealing with because it's a lot
30 of us giving up our traditional ways and our lands and
31 waters as this process goes forward and as increased
32 competition comes to these areas affecting our
33 resources and it's really difficult when you watch that
34 progressive change throughout our state and the
35 increased micro-management of the agencies engaged in
36 these processes.

37

38 Thank you.

39

40 CHAIRMAN BROWER: Thank you, Rosemary.

41 Doreen.

42

43 MS. LAMPE: Yes, thank you, Mr.
44 Chairman. Just in terms of outreach I really
45 appreciate you guys having this meeting here in Barrow.
46 I got really confused with all the different other
47 meetings going on this week. In terms of outreach, if
48 you could share your minutes with me via email, I could
49 share them with our regional tribal office and I could
50 kind of follow what your guys' proposed remedy is to

1 shooting on a moving all-terrain vehicle. I enjoyed
2 listening to your guys' discussion today. Thanks for
3 coming to Barrow. Thank you.

4
5 CHAIRMAN BROWER: Thank you, Doreen.
6 James.

7
8 MR. NAGEAK: Thank you, Mr. Chair. I
9 want to thank you for having me as an opportunity to be
10 part of this particular group because it's such an
11 awesome thing to be talking about these things and
12 things that we don't hear from the other agencies. You
13 know, we touched upon the spirituality of the
14 relationship between Inupiaq and -- I read what Patrick
15 saying when he mentioned that there are three groups in
16 this world, the Inupiaq, the white people and the
17 animals. You know, it's a whole together mentality
18 that makes us unique. I'm thankful that we can begin
19 to be cognitive of who we are. So it's always
20 important that we have that dialogue.

21
22 The thing that we have, you know the
23 representation, I think that some of us need to be more
24 active in going back to our villages and make it known
25 why I was here in Barrow this week. A lot of us don't
26 do that. We don't get a chance to talk to the whole
27 community about our very important participation in
28 being advisory to the Federal Subsistence Board, which
29 is -- you know. And I always promise myself, well, I
30 try to do that.

31
32 We have a unique situation I think in
33 Anaktuvuk Pass that we have a chance for the three
34 agencies that we have in Anaktuvuk to get together and
35 hash all the things that are important for the
36 community. The corporation, the tribal council, which
37 is trying to get on its feet again in Anaktuvuk Pass,
38 and also the City of Anaktuvuk Pass Council. So we get
39 together. We call that a leadership meeting and we
40 hash all of these things that we have.

41
42 We had a good meeting last week where
43 the school principal was there and Petro Star and asked
44 us what are your priorities, what are your needs here
45 in Anaktuvuk Pass and we were able to, as a leadership
46 group, including the school system, the public safety
47 person was there and all these other -- and have that
48 conversation and what the needs are for Anaktuvuk Pass.
49 Of course we're always concerned about our subsistence
50 lifestyle and how our subsistence would be affected by

1 the development around us.

2

3 The road to Umiat was one of the really
4 big ones that we really fought against. But we get
5 into what I read in the book called Catch-22 situation
6 where, you know, I'll be damned if I do this, I'll be
7 damned if I do that, you know. That's where we're at,
8 you know. We opposed the road, but when I have to pay
9 \$1.08 a pound for 100 pound dog food, it becomes really
10 expensive for me to get something out of Fairbanks to
11 Anaktuvuk Pass because we don't have that road.

12

13 Where in the same store there somebody
14 from Nuiqsut was loading up this big cart with all of
15 these things and she said, man, I'm glad I'm getting
16 all of these because I'm putting them on my truck and
17 taking them home to Nuiqsut. Man, I should have had a
18 V-8 that time. It really touched my heart because I
19 couldn't do that. I bought a \$164 door at the same
20 place with a frame. Took it to the airport freight
21 department \$465.

22

23 CHAIRMAN BROWER: For the freight?

24

25 MR. NAGEAK: For the same thing. So
26 that -- I'm always thankful that I have an opportunity
27 to be part of the conversation because of all the
28 problems we have in the small villages too. Thank you.

29

30 CHAIRMAN BROWER: Thank you, James, for
31 sharing that information. It's always good to hear
32 different views on how we perceive things and take
33 advantage of some of the situations that we're in.
34 Getting a real perspective of what we're having to go
35 through to accomplish some of our tasks.

36

37 I look to you, Eva. I could make a
38 whole bunch of more comments, but I think we have an
39 agenda that's getting shorter and our time is moving by
40 fairly quickly as we continue to communicate. So Eva.

41

42 MS. PATTON: Mr. Chair. The other
43 important items on the agenda the Council did want to
44 hear under special actions we actually gave Lincoln and
45 Geoff to speak to the caribou updates. In particular,
46 there's some focus on the Teshekpuk Caribou Herd. They
47 were actually going to be up next so that they could
48 address the Council briefly on Board of Game actions
49 for caribou and all the caribou herds.

50

1 Then we do have Marcy Okada on the line
2 and James does need to leave at about 5:00 o'clock to
3 catch his flight. Marcy was going to give an update
4 for Gates of the Arctic National Park and James is, of
5 course, the Subsistence Resource Commission
6 representative for this Council with that Park. And a
7 brief update on the road to Ambler access route. And
8 we have Dave Yokel, BLM/NPR-A, and the Council had
9 asked for some information on ice roads and just a
10 brief update on the Central Yukon planning and NPR-A
11 updates. Vince, I believe, had just a brief update for
12 the Council as well. So that's what's on the agenda
13 yet for today. Thank you.

14
15 CHAIRMAN BROWER: I was counting three
16 items, you listed 10.

17
18 (Laughter)

19
20 CHAIRMAN BROWER: Anyway, thank you,
21 Eva. So we'll go on. Should we take a five-minute
22 recess? So I'll ask for a five-minute recess at this
23 time.

24
25 (Off record)

26
27 (On record)

28
29 CHAIRMAN BROWER: Five minutes has
30 lapsed again fairly quickly. Lincoln Parrett is
31 patiently waiting and seated here and I'd like to give
32 him his opportunity to present our presentation -- his
33 presentation. Our presentation. His presentation this
34 afternoon. So President Lincoln, you have the floor.

35
36 MR. PARRETT: Four score and seven
37 years ago. Okay. So what you guys asked for was an
38 overview of caribou on the North Slope. Eva said I
39 could only talk for 15 minutes, so I'm going to try to
40 keep it to 25, but I've got lots more slides for
41 questions if people want, but I am going to try to keep
42 it fairly short because you guys are time limited.

43
44 I'm going to do all four herds like I
45 said, starting west, going east. One thing I should
46 mention is that the work that goes into monitoring
47 these four herds is a lot of work. It's basically five
48 people that put most of their time into doing this. In
49 addition to, you know, people like Brian Person, Dave
50 Yokel, some of the other agencies, I mean there's a lot

1 of time and money that goes into all this work, so all
2 that needs to be acknowledged. This is multi-agency
3 work that we just happen to be presenting on today.

4
5 Just a reminder of general ranges for
6 these four herds. Again, west to east, Western Arctic,
7 Teshekpuk, Central Arctic and Porcupine, plus all these
8 other herds in Alaska. There's 30-some herds that are
9 named, but these just happen to be the four big ones.

10
11 I put this map in here, this was last
12 fall, October 2013, just to show where the collars were
13 from all four different herds. A couple interesting
14 things I would show you here. Down on the Seward
15 Peninsula you have a collar from the Central Arctic
16 Herd, two collars from the Teshekpuk Herd and then a
17 whole bunch of Western Arctic collars. That's kind of
18 a new thing for us, especially the Central Arctic Herd,
19 to see one of those caribou go all the way over there.

20
21 The other thing you can see here is
22 that Wainwright in October had a bunch of caribou. A
23 lot of those caribou ended up drifting east and north,
24 which is, of course, we have caribou all over the place
25 around town right now. Then a bunch of these caribou
26 from Nuiqsut ended up going south. These caribou that
27 were kind of in the foothills drifted further south
28 into the mountains to another place here that has a lot
29 of mixing. That's basically right around the Haul Road
30 there. Either side of the Haul Road has caribou from
31 three herds as well. A lot of mixing going on there.

32
33 Then, if you keep going to the east to
34 these other yellow ones, a bunch of the Porcupine
35 Caribou on the south side of the foothills around
36 Venetie, Arctic Village, but a bunch of the Porcupine
37 are in Canada over by Dawson. What you don't see on
38 this map with those yellow dots should be another color
39 of dots and that's the Hart River Herd, which you guys
40 probably never heard of because they don't really come
41 to Alaska. The Forty Mile Herd, which you may or may
42 not have heard of because it's a big herd around
43 Fairbanks, and then the Nelchina Herd, which is another
44 herd. So this mixing just goes. It goes from one herd
45 to the next herd to its next neighbor to its next
46 neighbor to it's next neighbor.

47
48 You know, I mean that's caribou, right.
49 I mean caribou go all over the place. From a person's
50 perception on the ground, I think it's pretty easy to

1 just go, well, caribou are caribou, you know. It's
2 just some guy like Lincoln that wants to give them a
3 name and say they belong in a certain place. You know,
4 the thing of it is, they do go to certain places pretty
5 frequently. It's not 100 percent all the time
6 especially in winter, but the other part of that is
7 that there's a lot of mixing and that mixing causes
8 some difficulty in both studying it, counting them and
9 when you're trying to figure out harvest, you know.

10

11 If you go to a place around the Haul
12 Road there around Wiseman, a guy shoots 10 caribou.
13 Who are they? Well, I don't know. They're just
14 caribou, you know. We could estimate what proportion
15 of those. Maybe three of them were one, four were the
16 other. You're wrong, but maybe it's kind of right.
17 That's going to cause us maybe some problems in the
18 future if we start trying to regulate things a little
19 bit. We're going to also have to try to figure out,
20 you know, which caribou we're killing and that's going
21 to be difficult in the future.

22

23 One positive side to that maybe is that
24 they won't mix as much maybe when the herds get
25 smaller. Maybe it will be easier from that perspective
26 and they're going to contract their ranges. I have a
27 feeling, and this is just my gut feeling, that a lot of
28 this mixing we're seeing right now is just because
29 these herds have been so big for so long they're
30 searching. They're searching for something new. They
31 go east or they go west because they've never been
32 there before and they didn't know that there was
33 somebody else already there and there's caribou all
34 over the place.

35

36 CHAIRMAN BROWER: Lincoln, I have to
37 say something about that mixing that you're talking
38 about. Within our own Barrow area our families are
39 getting so big and large and what's hard for our
40 relatives to find wives, so they start moving across
41 the mountain range and beyond to find that lineage that
42 wasn't so close to each other. So that's the kind of
43 similarity that even humans have to go through.

44

45 (Laughter)

46

47 MR. NAGEAK: That s why I'm living in
48 Anaktuvuk Pass.

49

50 MR. PARRETT: There may be an element

1 to that. One thing I'd say is that these dots here,
2 they don't differentiate between the sexes, but on the
3 North Slope there's almost no bull collars and that
4 usually happens. The bulls almost always go to the
5 mountains every year. Almost all of them. Not all of
6 them, but almost all of them every year and I don't
7 really know why that is, but that's a big difference
8 and maybe those bulls are looking for some strange.

9

10 CHAIRMAN BROWER: The other girlfriend.
11 So, Lincoln, in regard to -- this is again just
12 traditional knowledge. When you talk about resources
13 from different areas, they just take a bite of that
14 resource and they know where it came from. Fish, for
15 example. Fish from the Meade River, fish from the
16 Topagoruk River, fish from the Colville area. Without
17 even telling them where they got the fish, they just
18 take a bite of it and they know exactly where it came
19 from. My grandmother was like that.

20

21 So I learned over time after the
22 families got separated, you know, with that land
23 selection and Nuiqsut got established, Atqasuk got
24 established, later on I heard about -- when I went to
25 visit my grandparents at Nuiqsut, we were at a dinner
26 at the other relatives there in Nuiqsut, indicating,
27 yeah, this caribou came from this herd. I don't know
28 why they try to tell us and separate these different
29 herds when they're all caribou, but I can tell you this
30 one came from this side of the river and the other
31 portion then was cooked and he'd say this one came from
32 this side of the river.

33

34 I was trying to figure that out in my
35 head, how the heck do you know all this stuff. Just
36 from the taste of the meat or the food that they're
37 eating. These are the kind of things that traditional
38 knowledge has passed on in the sense that you're able
39 to identify resources as to where they originated from.
40 I just wanted to share that with you in terms of
41 traditional knowledge and information that we continue
42 to use today. Thank you.

43

44 MR. PARRETT: I agree. I think other
45 people -- I mean I can't do that. I couldn't probably
46 taste the caribou. I think I can tell the difference
47 between one that's shot in the winter and the fall,
48 they taste a lot different, but I don't know if I've
49 ever been able to say, well, I think this comes from
50 somewhere different, but people can do that. People

1 can do that with sheep. They can look at a sheep and
2 tell you exactly where it came from.

3
4 MR. G. BROWER: Let me interrupt.....

5
6 CHAIRMAN BROWER: Turn your mic on,
7 Gordon.

8
9 MR. G. BROWER: Yeah, I just wanted to
10 add a little bit here too. You know, about caribou and
11 reindeer, you know, Harry's father, my dad, many other
12 folks on the North Slope back in the '30s, '20s, '40s,
13 engaged in lots of reindeer husbandry activities up
14 here, reindeer work. This was before there was
15 pipelines, roads. I've even heard there was not a
16 Teshekpuk resident herd at the time and listening to
17 those old-timers talk about where they were ranging
18 from, you know, the Colville River to the other part of
19 the Colville and back and moving them around.

20
21 They would become very, very alert
22 certain times because big herds would come. Herds from
23 the east, herds from the west would come and they would
24 have to be very alert because the reindeer is just a
25 follower. If you're not careful, the reindeer would go
26 along with the big herds and disappear. But these guys
27 watch what's going on in their surroundings. Big herds
28 would collide in the thousands and move around together
29 and then they would separate again and they did that.

30
31 I don't know if there's information
32 nowadays that you can use other than traditional
33 knowledge about this type of activity for caribou.
34 They did this meshing and then sometimes another herd
35 could lose 30,000 animals in one shot.

36
37 If you look at some of these little
38 dots, one caribou satellite and the size of the herd it
39 represents, you could be looking at 4,000 of those
40 animals represented by that dot from different herds.
41 It's not unusual to me to see that because I've heard
42 about it. It's traditional knowledge stuff and they
43 would intermix, but I think science is finally catching
44 up to be able to effectively see some of that going on
45 through radio telemetry, satellite and all that kind of
46 stuff. To me, it's just saying, yeah, that's correct.
47 They do that.

48
49 MR. PARRETT: In our experience, they
50 didn't do it for a little while, but it's probably

1 because they were smaller, the herds were smaller, and
2 they weren't doing it as much. Plus, like you said, we
3 have way more satellite collars than we used to.

4
5 Okay. I should jump to each of the
6 herds here. This is just population sizes since the
7 late '60s. The red acts as our minimum counts and then
8 the black dots with the arrow bars around them are
9 estimates. So we adopted this technique to
10 statistically estimate abundance. You can see that
11 especially recently from a management perspective
12 there's no difference, you know. I mean these caribou
13 aggregate so tightly that you're basically counting
14 them all anyway. So we feel pretty good about what
15 we've done for at least the last 30 years or so.

16
17 Western Arctic you can see since the
18 early 2000s when they were basically at their peak have
19 been on a decline. It's been a fairly gentle decline,
20 4-6 percent per year. That's been going on now, like I
21 said, for almost 15 years. What we think is happening
22 now is maybe it's steepening a little bit. We got two
23 photo censuses done on the Western Arctic this summer.
24 The first one is just nearing completion and then
25 they'll start counting the second one. Certainly, at
26 any rate, that's not going to show that that's changed.
27 If anything, it's probably going to show that it's
28 steepened a little bit. That's where we're at with the
29 Western Arctic. Probably getting below 325 at a
30 minimum and probably below 300 as well, but time will
31 tell. The next few months will tell what that is in
32 reality.

33
34 This is just modeling that decline.
35 Jim Dau put together a pretty basic population model.
36 You can see 265,000, that's the number that the Western
37 Arctic Working Group recommends that you start thinking
38 about changing things basically. That there's enough
39 pressure on that herd that you might want to start
40 changing some of your regulations and stuff. So you
41 can see that we're not very far away from that. In
42 fact, we may even be there if this population model is
43 correct.

44
45 CHAIRMAN BROWER: Question, Lincoln.
46 Western Arctic Caribou Working Group is suggesting that
47 regulations be drafted to change the number of animals
48 being removed from that population?

49
50 MR. PARRETT: That's right. They make

1 no recommendation yet on how that would take place.
2 They just recommend that that's the point at which you
3 change things.

4
5 MR. G. BROWER: Mr. Chair.

6
7 CHAIRMAN BROWER: Yes, Gordon.

8
9 MR. G. BROWER: If we're getting close
10 to thinking about reaching a threshold, maybe we're
11 there already like you said. It's going to be very
12 prudent that we work with you and work together. I was
13 recently in Anaktuvuk listening to the assembly
14 meetings going on over there. Been there on a
15 roundtable meeting. Caribou is a central issue in
16 Anaktuvuk. There's different things that have been
17 done, I think, that have been unsuccessful to date.

18
19 There's ways of doing some of these
20 things that we need to work together on. Maybe one of
21 these things is based on decline, based on competing
22 uses in an area to use the C&T determination as a
23 critical resource for the community to have access
24 during a defined window of opportunity between August
25 and October needs to really be talked about seriously
26 until the harvest is met as a critical nutritional need
27 for a community. There's already large concerns in
28 availability of these resources. Availability is
29 different than the amount of resources there are. That
30 needs to be very clearly defined.

31
32 MR. PARRETT: Some of the reasons
33 behind this decline, you can see for adult cows that
34 are collared the proportion that have died every year
35 has not been steady. It's increased over time. The
36 reasons for this may be fairly complicated but,
37 nevertheless, this is what we're observing. It's just
38 getting worse and some of these years were tremendous.
39 I think some of these very tremendous years are
40 associated with bad weather that is compounded by their
41 vulnerability to predation and those things are sort of
42 a double whammy.

43
44 A third of the adult cows died in that
45 year. I mean how could you not have decline if a third
46 of the adult females who are supposed to be basically
47 your most robust age class. They're supposed to be
48 doing well and they're not. Last winter turned out to
49 be a fairly easy winter for them. You can tell,
50 compared to the early '90s when that herd was really

1 growing, it's still pretty high. As far as why that's
2 happening, maybe we don't know perfectly, but we think
3 it is happening. This is not something strange going
4 on in the data that's causing this to rise.

5
6 At the same time, this is the
7 proportion of calves in the population in April/May
8 basically when they should have a pretty good chance of
9 -- you know, they made it all the way through almost
10 all the winter and they're probably going to survive at
11 a rate similar to adults from here on out. That's been
12 decreasing, so they're not surviving through the
13 winter. I can say they're not surviving through the
14 winter because recruitment, how many are there at the
15 end of the spring, is both a product of how many were
16 born and then how many survived. You multiply those
17 two and you get to there. The productivity for the
18 Western Arctic Herd has been steady, if not increasing
19 a little bit in recent years. So they're producing
20 calves, they're just not making it to the spring.

21
22 I put this in there. This is at Onion
23 Portage when we collar caribou on the Kobuk River when
24 we drive up to them. All the animals we handle -- and
25 this is the other cool thing about this, is from 1995
26 to 2013, this is one person evaluating this so he can
27 get calibrated. It's Jim Dau looking at these animals
28 and saying that's an average animal, that's a skinny
29 animal, that's a very skinny animal. The percentage of
30 skinny animals, skinny or very skinny animals --
31 there's basically five categories; very fat, fat,
32 average, skinny or very skinny -- that really has not
33 jumped up. That goes along with the idea that calves
34 are still being produced in this herd because you get
35 pregnant in October and so to get pregnant you've got
36 to be in pretty good shape come fall and that sort of
37 agrees with that.

38
39 We're not seeing a bunch of skinny
40 caribou come through in the fall. They're doing all
41 right in the summer apparently at least in terms of
42 nutrition. To us, that's what that means anyway; high
43 productivity and not seeing very many skinny animals.
44 That must mean that summer nutrition is not a huge
45 problem for them. When I say summer nutrition, it's
46 not just vegetation and everything, it's also their
47 ability to eat.

48
49 CHAIRMAN BROWER: The graph shows
50 there's no red.

1 MR. PARRETT: Yeah, so we have not
2 observed a skinny or very skinny animal in three years,
3 a bull.

4
5 CHAIRMAN BROWER: So it's indicating
6 they're healthy.

7
8 MR. PARRETT: That's what that means to
9 us. No skinny bulls and not a whole lot of skinny cows
10 either.

11
12 CHAIRMAN BROWER: I'm jealous.

13
14 MR. PARRETT: I've said a couple times
15 to you guys before, I say it to the Fish and Game
16 Management Committee meeting, Dau has done a great job
17 of putting together this jaw collection program. I
18 wish I could do the same. I wish Geoff and I had been
19 able to put the same thing together. What he's seeing
20 here, he's also got the benefit of some really old
21 data. I think this '59-'61 might have been associated
22 with Project Chariot or something like that. Anyway,
23 they've got jaws from a long time ago, from the late
24 '80s and also from the last 10 years.

25
26 What he's seeing there basically is in
27 the late '50s, early '60s when that herd probably was
28 just about to crash jaw lengths were small. They were
29 smaller jaws, smaller animals basically. When that
30 period from '85 to '90 when they were growing at a
31 pretty good clip, they were bigger and now it's pretty
32 marginal, but it looks like they're getting smaller
33 again too. Another indication that at some level,
34 maybe the season is not clear, nutrition is not as good
35 as it used to be. So this is all bulls that were at
36 least five years old basically, so these are mature
37 bulls.

38
39 I mentioned previously the Western
40 Arctic Management Plan that the Western Arctic Working
41 Group put together. It's kind of modeled after
42 something they did for the Porcupine Herd and I think -
43 - there's certainly nothing hard and fast about this.
44 This is just to kind of put you in the frame of mind,
45 you know. Green is good and when you're in the green,
46 you're good. Two elements of that, of course, is how
47 big the population is and then what it's doing.

48
49 I think that if a caribou herd is on
50 the increase like they were in the '80s and '90s, you

1 can harvest them really hard because lots of animals
2 are still going to make it besides the ones that you're
3 hunting. On the decline, I think things could be
4 pretty different, so this sort of incorporates elements
5 of that, whether the population is increasing,
6 decreasing or stable if you want to apply a different
7 harvest rate. Again, these harvest rates are not hard
8 and fast. They're sort of a starting point to talk
9 about.

10

11 In the State system, what these colors
12 mean is that the green and the orange are in general
13 hunts. That means basically any person can hunt that
14 wants to. Tier I in the State system means that it's
15 limited to Alaska residents and there may be some
16 jockeying in there for who gets what when. Tier II
17 you're differentiating between Alaska residents, so
18 it's really focused on subsistence hunters at that
19 point. You can see the harvest is very small there, 8-
20 12,000. Basically we've been above that for quite a
21 long time. People generally kill more than that every
22 year. When we get into that Tier II, we're in that
23 situation where we have less available than people
24 would really like to hunt. How the Federal system and
25 the State system is going to interact on this, that's a
26 question for you guys to deal with in some ways.

27

28 MR. G. BROWER: I've got a question.

29

30 CHAIRMAN BROWER: Gordon.

31

32 MR. G. BROWER: If you go back to the
33 other slide. General hunts, Tier I, Tier II and your
34 characterization of anyone can hunt, they're abundant
35 and no conservation measures are in place. I think
36 there needs to be from the Federal side and the State
37 side redefining general hunts whether they're abundant
38 or not. You put everybody in the mix together, fly-in
39 hunters, sport hunters, subsistence, in the same way
40 that I feel we're impacted by these conexas, these dome
41 tents, even if it's in the time of abundance, the
42 ability to reroute animals. There s no scientific
43 proof about it. Caribou will go anywhere they want to
44 go and they will. They will reroute themselves and who
45 knows who did it.

46

47 If you consider communities that have a
48 critical need for these resources in the same way we
49 made that case for bowhead whales for our communities,
50 even in times of abundance and general hunt you need to

1 have a mechanism in place so that those first animals
2 come through. It may mean that you identify an area,
3 maybe a plume between August and early October. That
4 plume is a subsistence hunt from the residents of this
5 community expecting the normal availability of those
6 resources, but allowing hunts maybe to occur outside of
7 that plume.

8

9 That kind of perception, there needs to
10 be some mechanism in place. I think it's been tried
11 with a controlled use area. This is a little bit
12 different type of a concept probably based on customary
13 and traditional determination.

14

15 MR. PARRETT: Yeah, that's something
16 available to you guys, I think. Like you're saying,
17 there's a subtle difference, but yeah. I mean I would
18 have said a controlled use area is very similar to what
19 you're talking about. It basically limits access.
20 Certainly those kinds of options and things like that
21 certainly exist. That's a way to allocate even though
22 a resource is relatively abundant.

23

24 This slide is about how many and who is
25 harvesting. We basically feel like the black bars,
26 which are based on household survey data, which is what
27 people up here are pretty used to, and then the red,
28 which is harvest tickets, they just generally represent
29 different people. So what you can see here is that the
30 red part, which is residents that live outside of the
31 Western Arctic range, as well as non-residents. So
32 those two people combine people from Fairbanks,
33 Anchorage, plus people from Cleveland and Timbuktu are
34 in the red. Most local people are in the black.

35

36 What you can see here is that that
37 allocation issue that you're talking about in terms of
38 preferential uses, you don't have a lot to play with
39 here. That red part is really pretty small compared to
40 the black part. If you're excluding certain users,
41 that's one year basically. I mean that herd could drop
42 enough so that all of a sudden you go from those people
43 being allowed to hunt Tier I basically to Tier II in an
44 instant. So there's not a lot of room here to work
45 with in terms of limiting people. It happens pretty
46 quickly where you go from everybody to -- I mean not
47 nobody, but.....

48

49 CHAIRMAN BROWER: I mean we've had
50 resources that we've had to go through that there's

1 nobody hunting.

2

3 MR. PARRETT: Yeah, exactly. Muskox,
4 for example. Yeah, that's a good example. This is
5 where harvest is occurring in the Western Arctic Herd
6 and so you can see the bulk of it we estimate are
7 coming from Unit 23, Kotzebue, Kobuk, Noatak, Ambler.
8 26A is a little chunk of it. It's especially
9 Anaktuvuk, Wainwright, Point Lay and then Point Hope,
10 to the extent that they're included in that. So 26A is
11 divided between Western Arctic and Teshekpuk, so this
12 is one of those places where we're going to be
13 concerned about mixing and who's killing what.

14

15 I guess this is as good a time as any
16 to mention that at the Board of Game meeting in January
17 -- the Teshekpuk Herd is pretty interesting in that a
18 customary and traditional use finding had never been
19 made for that herd, which is really odd because it's a
20 very real subsistence resource.

21

22 CHAIRMAN BROWER: They were stopped
23 from making those determinations. Now it's an
24 indication of there's no data on that. These sort of
25 things occur when the resource manager indicates that
26 there shouldn't be any more customary and traditional
27 use determinations be made on these resources when
28 there should have been. Now the indication is now we
29 don't have that data.

30

31 MR. PARRETT: Well, I think in '92 when
32 that happened, that's part of the argument was that we
33 don't have enough data, so we don't know what's going
34 on, so we're not going to do it. The record is not
35 completely clear on what exactly happened there, but as
36 far as we know it wasn't listed there. The argument
37 that the Board made when we presented the data was
38 that, well, clearly they were thinking about
39 Wainwright, Barrow, Atkasuk, Nuiqsut, so they were
40 already including the Teshekpuk. So what happened is
41 they basically said that the Western Arctic and the
42 Teshekpuk are combined now and that amount that had
43 been set before, which is 8-12,000, that's the amount
44 necessary for subsistence, didn't change. They kept
45 that level the same under the assumption that the
46 Teshekpuk was already included in that number that they
47 established in '92. That's for the State system.
48 That's the range in which -- and below when action
49 happens in terms of limiting who and how many.

50

1 CHAIRMAN BROWER: Lincoln, amounts
2 necessary for subsistence is putting limitation to a
3 user group for the availability of -- or to remove
4 caribou.

5
6 MR. PARRETT: Yes.

7
8 CHAIRMAN BROWER: I mean that's a very
9 poor term to use for when there's a need and population
10 declining for a community that's had historical use for
11 these resources. I'll stop there.

12
13 MR. PARRETT: That's one way to look at
14 it. There's a positive way to look at it too. The
15 positive way to look at it is that we need at least
16 this many, so everybody else -- you know, we're
17 dividing the cake amongst ourselves now and that's
18 another way to look at it. You can view it as a
19 protective device or you can view it as a quota which
20 has a negative connotation. Nevertheless, the number
21 is the same thing.

22
23 So what levels are sustainable. That's
24 a difficult question for managers to answer. I mean
25 how many can you take. You get into this question of
26 additive versus compensatory mortality. If you guys
27 don't know what that is, additive is basically if you
28 shoot it, it's an animal that wasn't ever going to die
29 anyway. The analogy I made on the radio this morning
30 was a fat cow out here, she doesn't have a calf, she's
31 in good shape, nothing wrong with her, she's probably
32 going to survive the rest of the winter, she's probably
33 pregnant. If you shoot that animal, that's an animal
34 that was more than likely going to live. That's
35 additive mortality.

36
37 Compensatory mortality would be
38 something like a seven year old bull. You shoot it in
39 August. It never got to breed or anything like that,
40 but that animal had a really good chance of dying over
41 the winter whether it's from just starvation or getting
42 poked in the gut by another bull or getting killed by a
43 wolf because it was weak.

44
45 Anyway, that's sort of the difference
46 between those two things and that's what you're trying
47 to understand when you're figuring out what's
48 available, what the harvestable surplus is. A big part
49 of that is when you're in a decline, the harvestable
50 surplus, the compensatory additive question on cows

1 almost starts to become irrelevant and that's why you
2 tend to want to pull back on cows right away, is you
3 want to save them.

4

5 That's the point that Jim has here is
6 that most cow harvest is probably non-compensatory,
7 especially if people are being selective. If you're
8 going to just shoot a cow and you don't care what it
9 is, maybe you are going to shoot a calf who might not
10 have made it or you're going to shoot a really old cow
11 that's limping, but most people aren't going to do
12 that.

13

14 The other thing about this is that
15 bulls die at a much faster rate than cows, so if we're
16 not adding calves back into the population, but we're
17 still losing cows and bulls, that bull:cow ratio is
18 going to shrink pretty fast because bulls die at a
19 faster rate than those cows. We're already seeing a
20 decline in that. That's going to become an issue
21 because if you lose all those bulls, it's not like you
22 can start moving the cows because you need cows to make
23 babies.

24

25 So the summary that Jim put together --
26 and obviously this presentation he put together was
27 like 70 slides, so I really skimmed through here.
28 They've observed some long-term changes in the winter
29 range. The abundance of lichen on some of their winter
30 range has gone down, so they are impacting their range.
31 The extent to which they're impacting it that's hurting
32 them is unknown, but at any rate they're observing that
33 things are changing.

34

35 Like I pointed out, there's some long-
36 term trends in calf survival. The bull:cow ratio is
37 starting to decline. There's some suggestion that body
38 size is decreasing. We're starting to see a lot of
39 these whether events over the last decade or so, even
40 earlier. All those things may have been affecting them
41 at some level. Lately they've sort of seemed like
42 they've been exacerbated. Things have gotten quite a
43 bit worse.

44

45 Jim thinks that predators are
46 influencing things a little bit more than they did 10
47 or 20 years ago. That's maybe a function of two
48 things. We don't have very good data on it. The
49 limited data that we do have suggests that bear
50 populations are much higher. That would corroborate

1 what everybody is seeing on the landscape. People
2 think that there's a lot more wolves. Again, we don't
3 have a lot of data on it, but that would certainly
4 corroborate what people are seeing on the ground.

5
6 Then this point that weather conditions
7 and the overall change in range may be causing some
8 malnutrition, which causes them to be more vulnerable,
9 which causes wolves to kill even more. So those two
10 things together may be really what's getting us right
11 now.

12
13 The other part is that for a long time,
14 for 30 years -- I mean regulations right now, even
15 though there's numbers, 10 per day, 5 per day, really
16 that's unlimited essentially still, but it didn't
17 matter for a long time what we did. I'm sure we were
18 affecting the growth rate to some extent. Maybe it
19 just meant that we were growing at 11 percent instead
20 of 13 percent or 13 instead of 15, but that's going to
21 change probably soon. We are going to have an impact.
22 What we do is going to matter a lot instead of hardly
23 any at all.

24
25 Then the last point that Jim would make
26 here is that future harvests are going to drive that
27 number down, the abundance, if demand remains stable.
28 We've seen that. Demand doesn't really fluctuate.
29 Access fluctuates. People want the same amount. It's
30 just whether or not they can get it or not. There's no
31 reason to think that that's going to change.

32
33 Especially in Unit 23 migration is
34 getting later and later and later and starting to get
35 to the point that bulls don't show up until they're in
36 rut, so nobody wants to shoot them, so they shoot cows
37 instead, so it's sort of a double whammy. How many
38 cows does it take to make a bull in terms of meat? I
39 don't know what the ratio really is, but it's more
40 animals and their cows. If that keeps going, that
41 could be a real issue in the future.

42
43 CHAIRMAN BROWER: Add on to that is the
44 health condition of the animal as well.

45
46 MR. PARRETT: Yeah.

47
48 CHAIRMAN BROWER: I mean the prime time
49 for the bull is in the fall season when they're at
50 their prime good health condition, fat, and weigh quite

1 a bit. If that's the case, you start removing the
2 females, you basically want to find the ones that are
3 in the same condition as the bulls. That gets to make
4 a hunter more selective.

5
6 MR. PARRETT: Yeah.

7
8 CHAIRMAN BROWER: I mean you want the
9 animals in fairly good shape or in condition to be
10 taken for food.

11
12 MR. PARRETT: Yeah. Let's just keep
13 going, I guess. We'll start moving east. Teshekpuk
14 Herd. This is just the general range. You guys have
15 seen maps like this a lot in the past. This is kind of
16 everywhere we've ever seen them go and that's a big
17 chunk of the state. You can see in that map that I put
18 up before where they were this fall and it's kind of
19 the same this year. There's a bunch of them kind of in
20 the foothills, maybe a little bit more in the south
21 here than they have been in the past. There's a bunch
22 by Wainwright, Barrow, then a bunch by Nuiqsut. Maybe
23 some years aren't as many as others, but this year
24 they're kind of using all three of those places pretty
25 heavily, so it's in some ways a pretty typical year.

26
27 The yellow part is the summer range.
28 The green is kind of the cabin grounds with the core
29 calving grounds or what used to be the core calving
30 grounds in red there.

31
32 So this is one thing I guess I should
33 point out here. This is why we think that -- this
34 range differentiation is what gives us some idea, for
35 example, that people in Barrow are mostly killing
36 Teshekpuk animals. People in Wainwright are killing a
37 mix. People in Atkasuk are killing mostly Teshekpuk
38 animals. People in Nuiqsut, because they have a
39 tendency to hunt on the west side of the river rather
40 than the east side of the river are hunting mostly
41 Teshekpuk animals. In Anaktuvuk, if you kill something
42 in August/September, it's probably Western Arctic, but
43 the later you get in the winter, they more likely
44 they've gone south and Teshekpuk animals have come in
45 and that's what you're hunting and I think that was
46 pretty typical what happened this year from what I
47 heard.

48
49 CHAIRMAN BROWER: James.
50

1 MR. NAGEAK: Thank you, Mr. Chairman.
2 So the caribou that are staying in Anaktuvuk, they're
3 Teshekpuk?
4
5 MR. PARRETT: That's what we would
6 think that they're pretty much Teshekpuk.
7
8 MR. NAGEAK: Just a couple, two or
9 three weeks ago I went out and looked at the caribou
10 and there was one with a collar on it.
11
12 MR. PARRETT: Joseph. His name is
13 Joseph. No, I'm just kidding.
14
15 (Laughter)
16
17 MR. NAGEAK: I didn't shoot at it. I
18 knew it was giving us good important information to you
19 guys. And they're fat. Is there a correlation on the
20 decline of the caribou and that they have more range of
21 food?
22
23 MR. PARRETT: I mean if they get into
24 fresh range, that's always good for them, especially if
25 they can access it. I'll give you an example of the
26 upper Kobuk. If you fly over it in the fall, it looks
27 like phenomenal range, thick lichen, but if you go
28 there in April, you realize that's a horrible place to
29 be. The snow is super-duper deep, it's no good and I
30 think it tricks a lot of caribou actually. You go and
31 look and they go, oh, my gosh, this is great and they
32 show up and then they get snowed on and snowed on and
33 snowed on and they can hardly walk around and then a
34 wolf comes or they just starve or whatever.
35
36 I think to some extent it's good for
37 them to find new range, but these caribou have been so
38 abundant for so long that I don't think there's a lot
39 of fresh range around anymore these days.
40
41 In terms of caribou being fat this
42 year, I think they may have had a good summer this
43 year. Maybe they'll do pretty well over this winter.
44 I'm not sure yet. The calves I've been monitoring --
45 you know, we've been collaring about 70 calves every
46 summer -- and they did pretty well this summer. I
47 think they did the best this summer than they have in
48 the last three years. Maybe they're having a good
49 summer, good winter.
50

1 MR. NAGEAK: Mr. Chairman. An
2 observation again. I think that because they were
3 staying north longer than they usually do and they have
4 more leisure time to not have to rush through the pass,
5 maybe there's a correlation on how fat they are this
6 winter.

7
8 MR. PARRETT: Maybe that's true. Maybe
9 a nice long fall is really good for them. I don't
10 know. That's getting into a fairly fine analysis of
11 time and that kind of thing where we don't really know.

12
13 This is winter range for the past --
14 for five specific years. We were looking pretty
15 intensely. This is also when we had a lot of satellite
16 collars out, so we were wanting to get basically a
17 better analysis of who was harvesting what when, so
18 this is part of why we did this. This is just sort of
19 replicating what we saw on the hatch line before in
20 terms of these three main wintering areas in the Brooks
21 Range near Nuiqsut and then between Wainwright and
22 Atkasuk. Those have always been pretty reliable places
23 for Teshekpuk Caribou to winter.

24
25 This slide, I had to put this up at the
26 Board of Game. This is like the only slide that you
27 have to have at the Board of Game. Basically telling
28 what your population size is, what your harvestable
29 surplus is. When I put this together at the time, this
30 is what the 2011 population was, 55,000. My model, I
31 have a population model that uses birth rates, death
32 rates, survival rates that are specific to different
33 age classes and sexes and stuff. It would predict that
34 there would be about 38,000 animals in 2013. At that
35 time I had not finalized my photo census estimate.

36
37 Available harvest based on a
38 harvestable surplus of 1.5 percent of the females and
39 15 percent of the males was almost 3,000 if the
40 population was 55,000. I knew it wasn't going to be
41 that high, more like 2,000 if the population is 38,000.
42 Again, at that time there was no herd finding for the
43 Teshekpuk for amount necessary for subsistence, but the
44 Western Arctic was 8 to 12 and, of course, that's what
45 the Western Arctic plus the Teshekpuk is, is 8-12,000.

46
47 There's intensive management law that
48 says that once a herd gets to a certain level you have
49 to do something about it. You have to try and help
50 them. That range for this herd is 15-28,000. That's

1 still a ways off for this herd, although it may come
2 quicker than we realize. And then a harvest objective
3 of 900 to 2,800. So those are a specific thing to
4 State law in terms of what they expect you to be able
5 to harvest out of that herd.

6

7 CHAIRMAN BROWER: In regard to the
8 amounts necessary for subsistence, you combined the
9 Teshekpuk and Western Arctic. If they were kept
10 separate, how would those numbers be representative
11 then?

12

13 MR. PARRETT: That's exclusively under
14 the purview of the Board of Game. That is what they
15 call an allocation issue. So not something that a
16 biologist gets to decide. However, if they would have
17 done things like they frequently have done in the past,
18 it would have been similar to historic harvests that
19 we've seen, so something around the range of plus or
20 minus 2,800 is what they might have done. The Western
21 Arctic, if you assume that the Teshekpuk wasn't
22 included in that 8 to 12 for the Western Arctic and
23 maybe 2-3,000 for the Teshekpuk is maybe a value that
24 they might have come to. Again, that's 100 percent
25 speculation on my part.

26

27 CHAIRMAN BROWER: The follow-up
28 question is would that be well under what we're
29 currently taking or is that way above what we're
30 currently removing from just the Teshekpuk Herd.

31

32 MR. PARRETT: Again, that's based on
33 historic stuff. The stuff that you have done, Taqulik
34 has done, some of the consulting companies, all that
35 kind of got put together in a report and I can
36 definitely tell you guys where to find that or make
37 sure that Eva can share that with you. The subsistence
38 division put a report together that basically said that
39 the communities in 26A harvest about 4,500 caribou a
40 year and we think that about 2,800 of those come from
41 the Teshekpuk, so that's what the number would have
42 been. It would have been basically what you guys have
43 been doing. That's normally how they do that. What
44 you have been doing or a little below.

45

46 CHAIRMAN BROWER: Thank you. Gordon.

47

48 MR. G. BROWER: Just a little maybe
49 understanding more of resource allocation. We're
50 basically just hunting under a resource allocation of

1 the larger herd. Not recognizing the Teshekpuk Herd,
2 right?
3
4 MR. PARRETT: Yeah.
5
6 MR. G. BROWER: That's what I'm
7 understanding.
8
9 MR. PARRETT: That's a way to interpret
10 that for sure.
11
12 MR. G. BROWER: Who makes those
13 decisions?
14
15 MR. PARRETT: For the State? The Board
16 of Game. Based on recommendations. I'll be honest
17 with you. One thing that they saw is that the North
18 Slope Borough Fish and Game Management Committee didn't
19 want to do it at all and as a result they basically
20 took that information and said if they don't want to do
21 it at all, we'll just assume that it was always part of
22 this other thing and leave it at that.
23
24 MR. G. BROWER: I'm just thinking here
25 because we fight over three moose. We're literally
26 duking it out over three moose sometimes when maybe
27 it's a resource allocation problem.
28
29 MR. PARRETT: It is.
30
31 MR. G. BROWER: We should be able to
32 revisit these things. I mean why make it so difficult.
33 In this case, we're swallowed up by the Western Arctic
34 Herd. It sounds like a good thing because we get to
35 harvest a big chunk, more than what maybe was allowable
36 if it was only a Teshekpuk Herd. You look at those
37 three moose in the Kaktovik area and you're trying to
38 conserve them. We've talked about their transient
39 nature, biologists attest to these things. They come
40 and go. Even though you kill them, maybe next year
41 three more will come. It seems to me we play games.
42 We play games with communities is what I think in terms
43 of duking it out over resources.
44
45 Just from looking at that analogy and
46 what's really going on here, it almost makes me maybe
47 put my hair on fire by itself and smoke coming out my
48 ears. Thank you.
49
50 (Laughter)

1 CHAIRMAN BROWER: Thank you, Gordon.

2

3 MR. PARRETT: I think there's two ways
4 to look at that resource allocation. When they talk
5 about allocation, really they're talking about
6 allocation between people, but there's another level of
7 allocation that's allocation between people and nature.
8 Really that's what you're talking about in that example
9 that you brought up, that Ikpikpuk/Chipp moose
10 regulation, should it be 156 or 155 because one
11 protects the moose on the river and one doesn't. Well,
12 do you want moose on the river or not. There's not
13 very many obviously, but sometimes there are. Do you
14 care about that. That's sort of an allocation
15 decision. The contrast is west of 156 if a moose shows
16 up here you can kill it because I don't think anybody
17 has an expectation that we're going to have a lot of
18 moose out here someday, at least any time in the
19 future. So there's two levels to that. I'm digressing
20 a little bit here, but that allocation issue is within
21 humans and then it's between humans and nature I think
22 is the distinction you're making there.

23

24 CHAIRMAN BROWER: It could be viewed as
25 a different concept as well, whether to be legal or
26 illegal hunters.

27

28 (Laughter)

29

30 CHAIRMAN BROWER: You know, if you keep
31 it at 155, keep everything over to the east and keep it
32 for sport hunting and other types of hunting, but it's
33 going to be allowed over here in 156, I'm going to take
34 the moose regardless of that regulation being there.
35 I'm going to subsist. That's the kind of attitude I'd
36 have in terms of the interpretation of some of these
37 regulations and how they get imposed on our types of
38 hunting that occurs. Thank you.

39

40 James.

41

42 MR. NAGEAK: Yeah, I missed it a while
43 ago, but there's another scenario than the moose. The
44 muskox. You know, there's no allegation for muskox
45 anymore, I don't think. They come to Anaktuvuk. Just
46 one of them come to Anaktuvuk and we can't harvest it
47 because we're law abiding. Right next to us are the
48 grizzly bear. He doesn't know anything about the
49 allocation process and the rules and regulations of the
50 Fish and Wildlife and Fish and Game, so they kill the

1 sucker.

2

3 (Laughter)

4

5 MR. NAGEAK: I can't shoot it and have
6 it for subsistence meat, but the bear just eats the
7 choice parts and leave it. So I'm saying to myself
8 here if the bear is going to get it, we know that they
9 will. Two or three bears against a muskox, it's not
10 going to take them very long to kill that. I'm law
11 abiding enough not to harvest that one muskox that
12 happened to come to my camp outside of Anaktuvuk Pass
13 and watch it being wasted, you know. I'm just bringing
14 out, you know.....

15

16 CHAIRMAN BROWER: I have a comment as
17 well in regards -- maybe I'll just wait for my comments
18 and let Lincoln continue.

19

20 MR. PARRETT: All right. So this is
21 what we're seeing for the abundance of the Teshekpuk
22 Herd. The peak we saw was in 2008 of 68,000. A 5
23 percent annual decline from 2008 to 2011 and then an
24 average of 17 percent per year from 2011 to 2013. That
25 number there is 38,000 plus or minus 10,000. This is
26 actually not a super high-quality estimate for us.
27 They were not very well aggregated and there were quite
28 a few collars missing, so we have to add those collars
29 in through our statistical technique, so that's what
30 gives you the error there. You don't know exactly
31 what's going on because you didn't actually count them.
32 You're just estimating that each of those collars
33 represents a bunch of animals that you didn't count.

34

35 MR. NAGEAK: Is it because they moved
36 down to the other side of the world down there?

37

38 MR. PARRETT: That's some of them.
39 Some of them are certainly those animals that were down
40 there with those Western Arctic animals. That's part
41 of it.

42

43 MR. NAGEAK: Do you count those too?

44

45 MR. PARRETT: Somebody counted them.

46

47 MR. NAGEAK: Has it declined?

48

49 MR. PARRETT: No. So those are
50 included in that. Statistically included. They

1 weren't counted by me. That's the difference between
2 the red X and the blue there. The red X is what we
3 counted and the blue is what we think there are on the
4 landscape.

5
6 CHAIRMAN BROWER: So you counted the
7 red X, not the blue one.

8
9 MR. NAGEAK: I'm color blind, I don't
10 know.

11
12 (Laughter)

13
14 MR. PARRETT: So that's what we counted
15 and that's what we think there are on the landscape.

16
17 CHAIRMAN BROWER: I just can't see the
18 differences in what you're talking about. Gordon.

19
20 MR. G. BROWER: So there is a major
21 decline in Teshekpuk Herd in your count.

22
23 MR. PARRETT: Yeah.

24
25 MR. G. BROWER: Down to 38,000 at this
26 point.

27
28 MR. PARRETT: Yeah.

29
30 MR. G. BROWER: Including those over on
31 the Brooks Range taking a siesta on the other side.

32
33 MR. PARRETT: Yes.

34
35 MR. G. BROWER: It seems to be
36 representative of all major herds that are on the --
37 like the Western Arctic Herd and the Teshekpuk Herd.

38
39 MR. PARRETT: We'll get some good news
40 right at the end of the talk.

41
42 MR. G. BROWER: But looking at this
43 model makes me happy that our allocation is through the
44 Western Arctic Herd at this point.

45
46 MR. PARRETT: Again, that's State
47 stuff, but yeah. State stuff does apply, like for
48 example right out here. On private land, that's where
49 State stuff applies. It also applies elsewhere, but we
50 don't need to get into that. I mean I think you're

1 right. I mean that was one of the arguments I made
2 actually is that if you include them, that means that
3 people here who hunt in the summer who have the first
4 access can take a big chunk of that, which means that
5 people in Unit 23 have a smaller part of the pie
6 potentially and that's again not a decision for me to
7 make, but that's a real issue. You're right, in some
8 ways it is potentially beneficial to you to be
9 acknowledged as having a part of that bigger pie.

10

11 I just put this line through here just
12 in case people like Harry couldn't see the dots, you
13 could see the line, and that's basically where we're
14 at. We kind of came through the hump there and we're
15 on our way down.

16

17 One thing I should say is that, you
18 know, that big trend in adult mortality where the
19 Western Arctic was climbing and climbing and climbing,
20 we haven't seen this. It's been real subtle for us
21 until last year. Last year was devastating. We lost
22 over 30 percent of the adult females, so we're finally
23 in some ways catching up to that kind of dynamic there
24 where females really took it hard last winter and the
25 calves took it very hard too. Of the 70 calves that I
26 collared or a little more than 70 last year, less than
27 20 percent made it all the way through the year, so
28 times were hard for adults and for calves.

29

30 That's one thing I should say, that
31 population model from 2013 to '14 would have estimated
32 a very, very slight decline, but then what really hit
33 us there was this big mortality that probably changed
34 things between 2013 and now.

35

36 Unlike the Western Arctic Herd that has
37 had pretty good calf production, the Teshekpuk has seen
38 a real slip in calf production. What that means again
39 is that we think summer conditions are not awesome for
40 this herd. They are not getting pregnant at a very
41 high rate and these numbers here, these 40 to 50
42 percent pregnancy rates, that's very poor. That's as
43 poor as you see anywhere. Some of those Interior herds
44 that have longer summers, a lot of times it's 80-90
45 percent of the adult females are pregnant, so this is
46 very unproductive for a caribou herd. That's obviously
47 kind of part of their problem here is that their summer
48 range or maybe the bugs are too bad or the combination
49 of both. They're not very productive.

50

1 CHAIRMAN BROWER: Lincoln. Go ahead,
2 Gordon.
3
4 MR. G. BROWER: Yeah, I think they were
5 just harassed by too many airplanes studying going on,
6 too many of those because I was watching them scaring
7 all the caribou away during when they're going to rut.
8 That's what I think. Anyway, I think there's an
9 alarming trend here that you're talking about and I
10 think this is going to have to convey these types of
11 dialogue. The communities now have to start to be more
12 aware of what's going on because I think there's going
13 to be impending regulation and people need to think
14 about this.
15
16 MR. PARRETT: Yeah. That's obviously
17 why I'm here. It's just a starting point.
18
19 CHAIRMAN BROWER: Thank you, Gordon.
20 Lincoln, I was going to say in regard to the chart
21 there it starts from 1990 to 2015 or '13.
22
23 MR. PARRETT: Well, the dot is for '13.
24
25 CHAIRMAN BROWER: I was going to say in
26 the 1990s there was communications about this Western
27 Arctic Caribou Herd at its maximum peak and it's going
28 to start declining at some point in time, but it just
29 kept stable for several more years.
30
31 MR. PARRETT: Yeah.
32
33 CHAIRMAN BROWER: Then comes 2000 you
34 start seeing indicators, stressors, slowly
35 acknowledging what the predictions were at that time.
36 With the global climate change impacts combined with
37 large predation from brown bears and wolves numbers
38 increasing, I have to agree to that. That's what I see
39 when I'm out on the tundra in the winter, this time of
40 year. I see large numbers, 30 animals in a pack. The
41 removal of brown bears through our subsistence, we've
42 addressed those regulations to one bear every year
43 trying to help the removal of brown bears with other
44 situations that we have to deal with in regards to
45 destruction of property and cabins and stuff like that
46 because of the increase of brown bears.
47
48 The other situation was the fencing of
49 the landfill in the Prudhoe Bay area, which was not
50 fenced for many, many years and a large number of bears

1 increased and basically moved out. As soon as that
2 happened, we seen the last of our muskox within Arctic
3 National Wildlife Refuge because of being predated on
4 by the brown bear.

5
6 That's what I was kind of smiling
7 earlier about. We couldn't even take anymore muskox
8 because the brown bear killed them.

9
10 MR. PARRETT: Yeah.

11
12 CHAIRMAN BROWER: There's a small
13 population still coming, transient, back and forth
14 between Canada and ANWR, which indicates there's a few
15 more muskox in there. I think one brown bear got
16 killed or something. I think that did occur. I mean
17 these are the things that we were made aware of some
18 time ago and now you're going through your census and
19 analysis again and it's giving you additional
20 information that this is really happening now.

21
22 MR. PARRETT: Yeah.

23
24 CHAIRMAN BROWER: So it's something
25 that's been in momentum along with the research that
26 goes on through the collared caribou information, the
27 kind of research that you do, Lincoln, monitoring the
28 health state of the cow calf.

29
30 MR. PARRETT: I think that's a good
31 analogy, that sort of freight train kind of analogy. I
32 mean when they get really big, they've got momentum and
33 even when things start getting bad on them, they're
34 huge and they still go for a while until finally the
35 bottom starts to drop out under them.

36
37 This is the same slide that I showed
38 for the Western Arctic. It's the proportion of the
39 population in the spring that's calves and same story
40 there. That line is almost identical. It's just
41 keeping fewer and fewer calves over the winter. That's
42 been happening over the long term.

43
44 I just put this in there for reference
45 for right now. Right now, like I said before, the
46 State regulations are five caribou per day with
47 basically no closed season for bulls and a very short
48 closed season for cows. The really only difference
49 with Federal regulations is 10 per day.

50

1 There's always been this registration
2 requirement for residents north of the Yukon River.
3 What the regulations say is you're supposed to go to
4 Fish and Game, sign up and say, hey, my name is Harry
5 Brower, Jr., I'm going to hunt some caribou. If you
6 live south of the Yukon River, you're supposed to use
7 this pink or orange, depending upon what color you
8 think it is, then you're supposed to punch out with a
9 sharp object. That's sort of the system. I guess I
10 put that in there partly just for reference to say this
11 is what's going on now and that's basically the
12 starting point where we go from in the future as we
13 kind of talk about this over the next year or so and we
14 develop regulations or proposals for regulations.

15
16 The harvest, like I mentioned before,
17 is about 4,500 caribou total in 26A. From the limited
18 data that we have, it looks like it's about a 80:20
19 ratio of bulls to cows. I think that's changed. I
20 think people have better access in the summer as
21 four-wheelers got better, so people hunt more bulls.
22 They have better access in the summer than they used to
23 on the tundra. Less hunting in the winter than there
24 used to be a long time ago, so that means that the
25 ratio of bulls is a little higher, I think, than what
26 it used to be. Then again, about 70 percent of that
27 total harvest is from Teshekpuk and the rest is from
28 Western Arctic and the Central Arctic, especially from
29 Nuiqsut on the Central Arctic.

30
31 Similar to that graph I showed you
32 before you can imagine 4,500 caribou per year in 26A
33 and then only an additional 49 caribou per year being
34 hunted by residents and an additional 40 on average for
35 non-residents. They are taking a very, very tiny piece
36 of the pie. People hunting the Teshekpuk in particular
37 hardly get up this far north. If they hunt on the
38 North Slope, they're hunting more around the Killik or
39 Anaktuvuk or whatever, on the Colville, so they don't
40 even hunt the Teshekpuk. They're hunting Western
41 Arctic animals.

42
43 The total annual harvest is high for
44 this herd. Right now it's probably somewhere between 3
45 and 6 percent of the population. Barrow is a big part
46 of that. The access they have really drives the total
47 number. Then of course the ratio, how much Western
48 Arctic are kind of in the area also influences that.
49 The Teshekpuk Herd has probably sustained the highest
50 harvest of any caribou herd in Alaska for a long time.

1 There's just a heavy subsistence demand on this herd
2 and it's sustained that for quite a long time.

3
4 In the past decade or so we've been
5 harvesting bulls at about 11-15 percent and cows at 1-2
6 percent, so that jives with basically the numbers I was
7 using to estimate the current harvestable surplus of
8 about 2,000 animals, which is probably a little bit
9 below what's going to happen this year. Access is
10 really good this year. I'm pretty sure over 2,000
11 animals are going to get harvested. So we're probably
12 going to eat a little bit of an overharvest for a
13 couple years here. That's just the way it is.

14
15 CHAIRMAN BROWER: In regard to those
16 regulations, they're currently in place, but there's
17 consideration for proposing changes. Changes to which
18 portion of the regulation, sport hunting regulation or
19 is it clear across the board all types of hunting?

20
21 MS. PARRETT: Well, again, those ANS
22 values are what tell you who you're regulating. I
23 guess what I would say there is, like I said, the piece
24 of the pie that non-residents, sport hunters, whatever
25 you want to call them, take is so small that they --
26 and the harvest on this herd is so high, that those
27 people run the risk, I'll just say, of being excluded
28 pretty quickly. So all of a sudden it goes from fairly
29 liberal regulations to limiting subsistence hunters.
30 That's just the way it's going to play out just because
31 there isn't a lot of non-subsistence use of this herd.

32
33 CHAIRMAN BROWER: Thank you.

34
35 MR. PARRETT: Conclusions. Obviously
36 we think this herd is declining. I think it's due to a
37 combination of a lot of things. Low and declining
38 productivity. They're very unproductive, like I said.
39 The ones that they are producing are not surviving at a
40 very good rate. Then adult mortality rates, especially
41 recently, have made a big jump.

42
43 The underlying mechanisms again are not
44 totally clear, but we think that for the Teshekpuk
45 there's both poor summer and possibly poor winter
46 nutrition. We think there's poor winter nutrition
47 because when we go out and weigh newborn calves,
48 they're very small. They're the smallest of anywhere
49 we've ever seen in North America.

50

1 Then that last thing I mentioned both
2 for the Western Arctic and this herd is that we think
3 there's a nutritionally risk of predation. When I
4 looked at why calves were dying last spring, a few
5 starved, a lot were killed by wolves and quite a few
6 were killed by wolverines. That really accelerated
7 through the winter. They kind of made it into the
8 fall, survived through October and November, but then
9 come March, April is when they really started dropping
10 like flies and a lot of them were killed by predators.
11 I don't think it was just because predators all of a
12 sudden were five times as abundant in April. I think
13 they were just getting easier and easier to kill. That
14 is largely speculation on my part though.

15
16 Then that last point, just like Jim was
17 making, for the Western Arctic harvest, it's going to
18 play an increasing role in herd dynamics. It used to
19 not matter a whole lot and now it's probably going to
20 start mattering pretty soon.

21
22 These population dynamics where you
23 have for a long time sort of stable mortality rates on
24 adult females, but you're not keeping as many calves,
25 so your average age of animals is just getting older
26 and older and older. Eventually they have to die and
27 that's what happens when you get that crash and that
28 may be part of why we went along at 14 or 15 percent
29 adult mortality and then jumped to 35 last year. It
30 was a hard winter and there's a lot of old animals out
31 there, I suspect. That's what I'm talking about when I
32 talk about a crash susceptible age structure. There's
33 probably a lot of old animals out there. That's
34 another thing I would love to verify through getting
35 ages on jaws. If I could get teeth from jaws, it would
36 help me understand if that's really the case or not.

37
38 I've just got a couple slides for the
39 Central Arctic herd. Just like the Western Arctic Herd
40 they've got two photo censuses last year on subsequent
41 days. They photographed them twice, so they're in the
42 midst of counting those right now. They also peaked in
43 -- well, I shouldn't say they peaked. They were at
44 70,000 in 2010, but we think that they're probably also
45 decreased. There's really no reason to think they
46 haven't actually because they suffered a very similar
47 mortality rate last winter. They also had a mortality
48 rate in the 30 percent range for the Central Arctic
49 Herd.

50

1 This herd for a long time was doing
2 very well. The population dynamics for this herd, as
3 you can see, it climbed rapidly. They were probably
4 the strongest in Alaska and probably in North America.
5 They were really doing well. Their calf survival rates
6 over a whole year were like 80 percent. Like 80 or 90
7 percent of the cows would give birth and 80 percent of
8 those calves would survive, so it's no surprise that
9 they grew very, very rapidly for a little while, but
10 they may finally be going through something here too.
11 It may have just been a one-time event for them or a
12 short-term sort of weather thing that caused that
13 really high mortality last year.

14
15 She's still counting those, so we don't
16 really know where that's going to be at. That question
17 mark I have up there is just.....

18
19 UNIDENTIFIED VOICE: Can you show the
20 range of the Central Arctic Herd on a map just so we
21 can understand.

22
23 MR. PARRETT: Yeah. Especially lately
24 in the summer they get way far east over by Kaktovik.
25 A lot of times the people hunting caribou in July,
26 those are a lot of times Central Arctic Caribou. They
27 used to be Porcupine. They're getting way far east
28 here. Sort of the road is kind of there. If that's a
29 landmark there, the Haul Road is kind of right there.

30
31 I've just got a few more slides. I
32 know we're really short on time here. Porcupine Herd.
33 2010 they estimated 170,000 and this last estimate that
34 we -- we did all four herds last summer, which is the
35 first time we've ever done all four the same year.
36 This number is just about to come out and it's going to
37 be 200,000 plus or minus 30 on either side, so they're
38 still doing pretty well and still on the increase it
39 looks like. So that's the one bit of good news I have
40 here.

41
42 That's my last slide and I only took 22
43 minutes, I think.

44
45 CHAIRMAN BROWER: Very good, Lincoln.
46 Taqulik, use the mic, please.

47
48 MS. HEPA: I was just asking, the
49 Porcupine still goes to ANWR to calve?

50

1 MR. PARRETT: Not really.
2
3 MS. HEPA: That's what I thought.
4
5 MR. PARRETT: Mostly not. Mostly in
6 Canada these days. Some still use a little bit of the
7 coastal plain in Alaska, but for the last decade the
8 vast majority of calving caribou are calving in Canada.
9
10 CHAIRMAN BROWER: Thank you, Lincoln.
11 I know we're getting kind of short on time and I really
12 appreciate you providing all this information from the
13 Alaska Department of Fish and Game to our Regional
14 Advisory Council. It's again something we've been
15 trying to keep up with all the information we have to
16 deal with in terms of the animals that are being
17 regulated and monitored. To be effective managers I
18 think these are the kind of information that's needed
19 so we're able to address the needs. Thank you.
20
21 James.
22
23 MR. NAGEAK: One quick question. Which
24 herd is the Arctic Village?
25
26 MR. PARRETT: So this year it's mixed
27 Central Arctic and Porcupine that people from Arctic
28 Village. I would say 10 years ago it would have been
29 all Porcupine and lately it's a mixture of both. Right
30 around Arctic it's still mostly Porcupine this year.
31
32 CHAIRMAN BROWER: Any other questions
33 from the listening audience within the teleconference.
34
35 (No comments)
36
37 CHAIRMAN BROWER: If not, again, thank
38 you, Lincoln. Billy, come up to the mic.
39
40 MR. ADAMS: Thank you, Mr. Chairman and
41 the Council here. Lincoln, you know, just to give
42 everybody a chance to know, Lincoln used to go to high
43 school here. You know Geoff has been working here many
44 years. If you go back to the picture where it is snow,
45 that was in early '80s, maybe late '80s. It was in
46 early October. We used to have a lot of snow back
47 then. Now, these days, there's hardly any snow in
48 October.
49
50 When you talked about the poor calving

1 a couple years ago there was a lot of die-off in the
2 caribou. We had some meetings with people from
3 Kotzebue area. That whole month of August and
4 September we got rained on, you know. It was really
5 wet and all the caribou moved to the high country.
6 Even around here, you know, it flooded everywhere. The
7 caribou just didn't like that, so they moved into the
8 hills. So they had a lot of stress going on with them.

9
10

11 You don't have to be a rocket scientist
12 or 10-year biologist to know it. People have lived
13 here for thousands of years and I like to talk about
14 the Inupiat people being the true conservationists.
15 You know, they're stewards of the land. They know
16 what's going on. Now we've got biologists that have
17 been here for a couple hundred years or a hundred years
18 and they think they know everything, you know.

19

20 (Laughter)

21

22 MR. ADAMS: But, you know, we have to
23 work with you, like Gordon says. I hope we'll be here
24 for a few more thousand years to make you understand
25 what we know. So even though the President's term is
26 coming up, right, the U.S. President, is that right?

27

28 UNIDENTIFIED VOICE: Two more years.

29

30 MR. ADAMS: A couple more years. But
31 that's getting close to the end. It seems like when
32 the president's term is getting close to the end, it
33 seems like they want to list everything. Then now you
34 come here and say, well, let's say these caribou are in
35 a crash. That kind of seems to me that kind of stuff
36 goes on and now we have to give you a few more thousand
37 years to educate what goes on.

38

39 Honestly, our Inupiat people have been
40 here for thousands of years and they know what to hunt
41 and when to hunt. You know, it come through seasons.
42 I thank this Council here for inviting many of the
43 public and bringing the State here to give a good
44 presentation. That was very educational for me. Thank
45 you.

46

47 CHAIRMAN BROWER: Lincoln, are you
48 going to be the one presenting something on the
49 regulation?

50

1 MR. PARRETT: Well, you know, I guess
2 that's the last thing I'd say is that, you know,
3 there s a lot of different ways to go about that.
4 There's a lot of different regulatory groups. The Fish
5 and Game Management Committee, this group, the Western
6 Arctic Working Group. And three of those groups are
7 groups that can try to present their own version of the
8 regulations. If nobody did anything, the State would
9 probably present something for consideration.
10 Obviously we'd like it to come from you guys, you know.
11 That's why I'm here today. It's not because we're
12 going to make regulations today, but because we're
13 going to want to talk about it a lot over the next year
14 or so.

15
16 CHAIRMAN BROWER: So just to think
17 about regulations for.....

18
19 MR. PARRETT: Yeah. How to do it, how
20 to play it out, what kind of seasons would work for
21 people and work for caribou and all those things. I
22 mean there's nothing -- I'm not saying I'm making
23 decisions, that's for sure.

24
25 CHAIRMAN BROWER: All right. Thank
26 you, Lincoln. Taqulik.

27
28 MS. HEPA: Thank you, Mr. Chair. We
29 did have a discussion recently with Brian and Michael
30 and others and Billy. Because these caribou are so
31 important to our people, to all of our communities. If
32 there are going to be quota restrictions, there needs
33 to be education and outreach right now to let the
34 people know what is going on.

35
36 I really do appreciate your last
37 comment about if the local people working together come
38 up with solutions on their own, I think that's the best
39 way to do it instead of someone else telling us how
40 things are going to be changed. So we need to be
41 proactive.

42
43 Two things that we talked about
44 recently is we have our Fish and Game Management
45 Committee meeting coming up in early April, so we
46 wanted to dedicate much of that meeting to talk about
47 the caribou situation.

48
49 Also James brought up that at the last
50 assembly meeting there was many concerns that came up

1 in Anaktuvuk Pass regarding caribou. I know that Mayor
2 Brower had made a recommendation that in the near
3 future we need to have a workshop to talk about some of
4 these issues related to subsistence. So I was going to
5 ask you what days you might be available, either in
6 March or in April, to address the assembly and/or Fish
7 and Game Management Committee, but we'll talk about
8 that.

9

10 It's so important that we get out there
11 and talk to our people, let them know what's going on,
12 bring the community members and hunters together to
13 talk about how can we address this as a community.
14 Thank you.

15

16 CHAIRMAN BROWER: Thank you, Taqulik.
17 I'm not sure if you wish to respond, Lincoln, but if
18 you don't, you don't have to. I'm not going to force
19 that on you.

20

21 (Laughter)

22

23 CHAIRMAN BROWER: We'll have other
24 opportunities to communicate. I think that
25 communication line is open. We know Geoff's office is
26 just down the road from our main Borough building.
27 Just reach out the window and you can knock on the
28 building basically. Anyway, thank you, Lincoln.

29

30 MR. PARRETT: I certainly will make
31 myself available. Jim Dau and Geoff in their long,
32 lustrous careers have never had to deal with a single
33 regulation change to caribou. Obviously this is the
34 most important thing I will have ever done in my
35 career.

36

37 CHAIRMAN BROWER: Thank you. My arm is
38 being twisted far back. I have to stop here and
39 recognize one of our guests that's been patiently
40 waiting on the telephone. Marcy, I'd like to give you
41 this opportunity to provide your presentation while
42 James is still here. He's supposed to be leaving at
43 5:00.

44

45 MS. OKADA: Okay. Thank you, Mr.
46 Chair. I gave Eva a handout to be distributed.

47

48 CHAIRMAN BROWER: We've got them in
49 front of us.

50

1 MS. OKADA: I'll quickly go through the
2 handout. The Western Arctic Caribou Herd is continuing
3 to decline, as we heard from Lincoln's presentation.
4 The 2013 census results are due out this spring. Adult
5 cow mortality has been higher than expected and high
6 human harvest of cows could possibly deepen this
7 decline. The very cold spring observed in 2013 did not
8 delay the spring migration substantially. I listed
9 contact information about caribou.

10
11 Dall sheep. Last winter and spring
12 appear to have been hard on Dall sheep in the rugged
13 mountains of the Itkillik or subarea of the
14 northeastern parts of Gates. The numbers from 2005 to
15 2012 are stable and not different from counts in the
16 early 1980s; however, preliminary estimates from the
17 2013 survey show as much as a 50 percent decline in
18 total numbers in ewe-like sheep. There's very little
19 ram productivity.

20
21 The numbers of rams with greater than
22 half curl horns show a change from 2009 to 2013. We
23 presented these results last September at a community
24 meeting in Anaktuvuk Pass. It was a long winter and
25 very cold May that were considered to be contributing
26 factors to the low ram productivity across the state
27 and higher winter mortality of adult ewes and yearlings
28 in the Itkillik. We have plans to survey the Itkillik
29 subarea in 2014.

30
31 I'll share a little bit of Yellow-
32 Billed Loon information primarily because the species
33 can also be found in your region. Last summer the
34 Arctic Inventory and Monitoring Program, a branch of
35 the National Park Service, completed its fifth year of
36 breeding population surveys and contaminate sampling
37 for Yellow-Billed Loons on the Seward Peninsula and
38 Bering Land Bridge National Preserve. This project was
39 assisted by the U.S. Fish and Wildlife Service.

40
41 Results from the aerial surveys and
42 contaminates sampling will be considered with data from
43 other breeding populations occurring mostly in the
44 National Petroleum Reserve. There's an upcoming
45 decision for listing the bird under the Endangered
46 Species Act.

47
48 Also related to the Yellow-Billed Loon
49 project, two students, one from Anchorage and one from
50 Shishmaref participated in Yellow-Billed Loon filming.

1 Unfortunately there was poor weather in Kotzebue and
2 there's limited footage that was collected. I think
3 they're going to try and do the project again. There's
4 a YouTube video and also another video online regarding
5 this project.

6
7 I'll quickly wrap up. Gates of the
8 Arctic Subsistence Resource Commission had a meeting in
9 November in Fairbanks. There was also discussion on
10 the Ambler Mining District access project. An SRC
11 member shared their concerns about the potential
12 negative impacts to subsistence resources. Park
13 Service staff provided natural and cultural resource
14 update and also relayed this information on the Park
15 Service Native Affairs Program.

16
17 Lastly, Gates of the Arctic recently
18 hired Maria Burger, environmental education specialist.
19 She worked for U.S. Fish and Wildlife Service in Barrow
20 as an environmental education specialist. She's going
21 to be helping Gates with rural school education
22 programs primarily related to wilderness, outdoor
23 activities and conservation.

24
25 That's quickly our Park update.

26
27 CHAIRMAN BROWER: Thank you, Marcy.
28 That's very helpful and informative. I'm not sure if
29 James has any comments he'd like to share with Marcy at
30 the time, but I'll give you the opportunity first,
31 James, before anything else.

32
33 MR. NAGEAK: Mr. Chairman.

34
35 MR. OKADA: I know you've got about
36 five minutes, James.

37
38 MR. NAGEAK: Thank you, Marcy. I'm
39 always thankful for the help that you always give us,
40 especially at our SRC meetings. The thing that gets me
41 is these Yellow-Billed Loon. It's kind of
42 disheartening to see them get in -- well, maybe not
43 disheartening now that I think about it. If we have it
44 causing the preservation of Yellow-Billed Loons, if we
45 put them on an Endangered Species list, that there
46 should be a clause in which -- for traditional
47 headbands for dancing and stuff like that would be
48 something that we could maybe put in there so that the
49 people that have dance groups uses the Yellow-Billed
50 Loon headbands for the ceremonies.

1 Other than that, I'm thankful that the
2 SRC can be a useful conduit for the Federal Subsistence
3 Board that we can coordinate a lot of the stuff that we
4 need to -- that needs to be addressed to the Federal
5 Board. With that, I thank you for an opportunity to be
6 a part of this.

7
8 MS. OKADA: Thanks, James. We
9 appreciate both you and Taqulik's membership on our SRC
10 for Gates of the Arctic.

11
12 CHAIRMAN BROWER: Thank you, Marcy. Do
13 we have somebody else online?

14
15 MS. AHTUANGARUAK: I really appreciate
16 all this discussion. It's so important that we really
17 work on education and communication and outreach very
18 effectively. We also have to do some coordination with
19 prevention and preparation for the responses that some
20 of our people may be going through with some of this
21 information that's coming out. I hope that we have
22 some time to really work on a good process that really
23 helps people prepare for what we're seeing in these
24 discussions.

25
26 CHAIRMAN BROWER: Thank you, Rosemary.
27 We'll continue to communicate with you if there's any
28 further concerns through our coordinator, Marcy, in
29 regards to the contents of the presentation. James is
30 already up and his ride is here, so just to let you
31 know that he is basically walking out the door at this
32 time.

33
34 MS. OKADA: Okay. The second part of
35 our presentation, I'd just quickly like to share
36 information on the Ambler Mining District. This
37 information has been shared with James at our SRC
38 meeting in November. The reason I want to share
39 information for a project that's outside of your region
40 is that it could potentially have an effect on
41 migrating herds. There should be a second handout.
42 I'll just quickly go over it.

43
44 CHAIRMAN BROWER: Ambler Mining.

45
46 MS. OKADA: Just to give you background
47 information, before ANILCA created Gates of the Arctic,
48 the likelihood of rich mineral deposits in the Ambler
49 Mining District to the west of the Park had already
50 been identified. Congress, in considering the

1 establishment of Gates, recognized that a
2 transportation corridor to the Ambler Mining District
3 might become desirable and might connect with the
4 Dalton Highway to the east of the Park. The Upper
5 Kobuk River area was included in Gates of the Arctic
6 National Park as a Preserve. However, Congress made
7 allowances for a transportation corridor across the new
8 Preserve in order to provide access for future
9 development of mineral resources in the Ambler area.

10

11 Some legislative background. ANILCA
12 201(4) (d) directs the Department of Interior and the
13 Department of Transportation to provide a response to a
14 right-of-way application that would go through Gates of
15 the Arctic National Preserve. Secretaries of Interior
16 and Transportation, upon receipt of an application, are
17 to prepare an environmental and economic analysis for
18 determining the most desirable route for the right-of-
19 way and for determining terms and conditions which may
20 be required. This analysis is to be done in lieu of an
21 environmental impact statement -- it's going to be
22 instead of an environmental impact statement -- which
23 would otherwise be required under Section 102(2) (c) of
24 NEPA, National Environmental Policy Act.

25

26 The analysis is going to consider
27 alternative routes across the Preserve which would
28 result in fewer or less severe impacts on the Preserve
29 and also consider environmental, social and economic
30 impacts of the right-of-way on wildlife, fish, their
31 habitat and rural and traditional lifestyles, including
32 subsistence, and measures which should be taken to
33 minimize negative impacts and then have positive
34 impacts.

35

36 Current status. November 2010, the
37 Alaska Department of Transportation and Public
38 Facilities notified the Park Service of its intention
39 to submit an application for access across the Kobuk
40 River area and Gates of the Arctic. The Alaska
41 legislature has funded DOT to study the feasibility of
42 constructing a road from the Dalton Highway to the
43 mining district. Those studies have begun and overland
44 routes to the mining district, including two potential
45 route corridors through the Gates Preserve have been
46 identified.

47

48 Last year, in 2013, the State of Alaska
49 assigned the lead for the Ambler Mining District Access
50 Project to the Alaska Industrial Development and Export

1 Authority, also known as AIDEA, a public corporation of
2 the state of Alaska. AIDEA is working with DOWL to
3 acquire environmental and economic data to inform road
4 feasibility and route decisions. The studies are
5 independent of an environmental and economic evaluation
6 that are required of the Park Service.

7
8 In 2013, the Park Service issued
9 research permits for the State sponsored research
10 activities in the Park and Preserve related to
11 resources which may impact or be impacted by a road.
12 The research projects are centered in the southern
13 portion of Gates and includes the snow survey, fishery
14 survey, and wetland vegetation survey, hydrologic and
15 hydraulic surveys of the Kobuk and the Reed Rivers and
16 cultural resource reconnaissance surveys.

17
18 A National Park Service team of Park
19 and Regional staff was formed in May 2013 to address
20 Park Service responsibilities in responding to a right-
21 of-way application and the Park Service team will be
22 working with the Federal Highway Administration, which
23 is the agent for the Secretary of Transportation.

24
25 That was a quick briefing in a
26 nutshell. That's basically what's happening to the
27 southern portion of Gates. My apologies for speeding
28 through this.

29
30 CHAIRMAN BROWER: No problem. At least
31 the information gets presented, Marcy. Again, we'll be
32 able to communicate with our staff and our remaining
33 Council members regarding the Ambler Mining District
34 even though it's on the south side of the Brooks Range
35 and how it may impact Anaktuvuk Pass to the north of
36 the proposed road. We'll definitely keep in touch with
37 James and see how his community feels regarding this
38 proposed road through this Council.

39
40 I think we have a question to you from
41 Doreen Lampe, who is the executive director for Inupiat
42 Community of the Arctic Slope.

43
44 MS. OKADA: Okay. Thank you.

45
46 MS. LAMPE: Thank you, Mr. Chair. In
47 regards to the Yellow-Billed Loon listing, ICAS has
48 joined the lawsuit to recommend not to list them. I
49 just wanted to comment that we don't eat them, we don't
50 hunt them to eat them, but like James said, we support

1 our member s use of the customary and traditional
2 Eskimo dancing for the dance groups here that need to
3 make an occasional loon head or mask.

4

5 I don t necessarily know if they re
6 Yellow-Billed or not, but we still are grappling over
7 the issue of the authority of Fish and Wildlife to go
8 and take a loon out of a personal net that was used to
9 go fishing and incidently had a trapped loon in his net
10 and some unforeseen or unreported -- not even consulted
11 with the local tribes, their reasoning to demolish that
12 net to take that incidental take of that Yellow-Billed
13 Loon.

14

15 I just wanted to make some comments
16 that we don't eat them, we don't consume them, but just
17 for the benefit of our dance groups to protect
18 themselves we are joining the lawsuit to fight against
19 the listing of these species. We'd hope that these
20 agencies that have the authority to propose threatened
21 or actually endangered species listing become listed
22 that they actually do come and consult with the tribes.
23 It's an executive order by the President and we're not
24 seeing that at all. It's our comments. Thank you very
25 much.

26

27 CHAIRMAN BROWER: Thank you, Doreen.

28

29 MS. OKADA: Thank you, Doreen. I know
30 in regards to Anaktuvuk Pass we have asked whether
31 people have been seeing Yellow-Billed Loons and our
32 understanding is that they're not finding any Yellow-
33 Billed Loons in their lakes or the community. Our
34 jurisdiction is strictly over Gates of the Arctic. We
35 do recognize the need for government-to-government
36 consultation though on this issue.

37

38 CHAIRMAN BROWER: Thank you, Marcy.
39 Eva, I'm trying to think back in terms of what the
40 communication was on this next agenda item. So we have
41 three more items. We'll go with Geoff Carroll, Board
42 of Game update.

43

44 MR. CARROLL: All right. I can make
45 this very quick. I'll skip all my slides and
46 everything. This is Geoff Carroll, Alaska Department
47 of Fish and Game.

48

49 Basically one of your primary functions
50 is to recommend proposals on the Federal regulatory

1 side of things and in order to -- it's good for
2 everybody to kind of keep State things and Federal
3 things, regulations in alignment. Anyway, I'm just
4 going to very quickly tell you what actions were taken
5 by the Alaska Board of Game in January.

6
7 There was a proposal to extend the
8 moose season on the Colville River. That was done at
9 the request of the Nuiqsut hunters primarily from the
10 North Slope Advisory Committee that was passed, so the
11 season was extended until the end of September. That
12 was Proposal 20.

13
14 We have a handout that Eva gave you.
15 If you want any more detail on any of these, you can
16 look at those.

17
18 Proposal 21 was a proposal to allow the
19 use of aircraft to hunt moose in the Anaktuvuk Pass
20 controlled use area and they voted that down, so that
21 was not allowed. That was definitely opposed by the
22 people from Anaktuvuk Pass.

23
24 Proposal 22 was to reauthorize the
25 antlerless moose hunts. We have kind of a summer hunt
26 for any moose that might wander out to one of the
27 villages in the west and then we have a winter hunt
28 that's for the upper part of the Colville River. There
29 are very few cow moose harvested in either one of
30 those. They passed that. That was at the request of
31 the North Slope Advisory Committee.

32
33 Proposal 23 had to do with the
34 Teshekpuk Herd customary and traditional ranking and
35 amount necessary for subsistence and Lincoln has
36 already run you through that pretty thoroughly.

37
38 Then there's kind of a weird one,
39 Proposal 24, which proposed no limit and no closed
40 season for the hunting of coyotes, which, as far as I
41 know we don't really have any on the North Slope except
42 maybe a couple very rare sightings, but they did pass
43 that.

44
45 Then there was a proposal to
46 reauthorize a no-tag fee for grizzly bears. They
47 passed that, so that basically means that you don't
48 need to go in and buy a \$25 tag. You don't need any
49 special permit. If you have a hunting license, you can
50 harvest a grizzly bear 12 months a year in GMU 26A.

1 You just need to bring it in and get it sealed after
2 you harvest the bear.

3
4 That's what was dealt with at the Board
5 of Game meeting.

6
7 CHAIRMAN BROWER: Thank you, Geoff. We
8 did have information about that situation that came
9 through our North Slope Borough Assembly and a report
10 from one of the assemblymen about Game Management Unit
11 23 and use of a motorized vehicle.

12
13 MR. CARROLL: Okay. Yeah.

14
15 CHAIRMAN BROWER: That's something that
16 we discussed a little bit yesterday and we're going to
17 take action and asked the motioner and the second to
18 rescind that motion to hear more information on what's
19 being proposed from our North Slope Borough Fish and
20 Game Management Committee as a local advisory committee
21 to address that concern. Taqulik is here and I had
22 asked either her or Mike to help in communicating what
23 direction the Fish and Game Management Committee might
24 be taking as their local advisory committee.

25
26 MR. CARROLL: Yeah. Okay. Like I say,
27 there was a Board-generated proposal as a result of a
28 proposal that the Kotzebue Advisory Committee wrote up
29 which would allow the pursuit of caribou, wolves and
30 wolverines with snowmachines. Then other advisory
31 committees were invited to join in on that proposal
32 because the word went out to the other advisory
33 committees and I think you were handed yesterday a
34 letter that was written by the North Slope Advisory
35 Committee people. The Wildlife Department created it
36 and then it was sent to the advisory committee members
37 to kind of vote yes or no on whether the North Slope
38 Advisory Committee wanted to be included -- wanted Unit
39 26A or North Slope to be included in that regulation or
40 in that proposal.

41
42 I don't know if you still have it in
43 front of you there, but again that gives you -- there's
44 the cover letter and then the next two pages are the
45 Board-generated proposal.

46
47 CHAIRMAN BROWER: Taqulik, did you want
48 to elaborate a bit on where we are with the North Slope
49 Advisory Committee.

50

1 MS. HEPA: Yeah. We're still waiting
2 on three more responses from our membership to see, but
3 right now the members are in favor of supporting to
4 include Unit 26 in that statewide proposal for the
5 March meeting. What I understand is that the language
6 that was drafted and that was included in the handout
7 initiated the Board to do a proposal at the statewide
8 meeting. Is that correct?

9

10 MR. CARROLL: Yeah. That meeting will
11 be in March.

12

13 MS. HEPA: Then just in addition what
14 we are planning to do from the North Slope Borough
15 Wildlife Department and the Fish and Game Management
16 Committee is we want to get a good group of hunters to
17 go down and be able to provide testimony on their
18 experiences, so we're planning on bringing maybe three
19 or four people down to provide testimony at that
20 meeting.

21

22 CHAIRMAN BROWER: Thank you.

23

24 MR. G. BROWER: Mr. Chair.

25

26 CHAIRMAN BROWER: Yes, Gordon.

27

28 MR. G. BROWER: Maybe as long as you
29 provide immunity for their testimony as well.

30

31 (Laughter)

32

33 MR. G. BROWER: But I do have a
34 concern. I read a little earlier about language on
35 harassing, molesting with caribou. I think that's, to
36 me, inappropriate language to use. Just the plain
37 language of taking caribou or wolf or wolverine from a
38 snowmachine is sufficient. It seems to create some
39 negative connotations when you start to add additional
40 language that seems we're doing other than hunting.

41

42 MR. CARROLL: I think the idea is --
43 well, you know, we'll see how it evolves, but I think
44 we still want it to be against the law for people to
45 harass or molest caribou with snowmachines.
46 Unfortunately we've seen some of that around here this
47 year. Kids getting out and chasing caribou with
48 snowmachines, you know, exhausting them. None of us
49 approve of that and that should be against the law.
50 What this will allow is a legitimate hunter to pursue.

1 I don't know. I think different people look at it
2 differently. Somebody might say, well, yeah, I think
3 that you should be able to use a snowmachine to pursue
4 and shoot and everything else a wolf, but we're kind of
5 heading into tough times with the caribou, so maybe we
6 need to take it a little easier on them. I'm just
7 saying that there are different options with this.
8 Some animals could be included and some not. Anyway,
9 that's for people to discuss and decide what's
10 appropriate.

11

12 MR. G. BROWER: Mr. Chairman.

13

14 CHAIRMAN BROWER: Yes, Gordon.

15

16 MR. G. BROWER: I wasn't trying to
17 point out species. I was just using animals in general
18 as a term. The words themselves for the taking of wolves
19 by the use of snowmachine is allowed. But I had seen
20 some language that I read in here that said you should
21 be able to harass, molest all these animals with a
22 snowmachine and I beg to differ. I think it should be
23 totally disallowed to do all of that except the only
24 thing allowed is to be able to -- you're able to pursue
25 and track. What we're doing is tracking. We find the
26 tracks for a wolverine. He might be 50 miles in front
27 of us, but we're tracking it and going to pursuit and
28 then take it. It's a fully intentional take. We're
29 not out there to harass and molest it and make it all
30 tired and then go away from it after that. That
31 language I thought I read somewhere in one of these
32 things.

33

34 MS. HEPA: It's existing language.

35

36 MR. G. BROWER: We should take all of
37 that out.

38

39 MS. HEPA: If I may, Mr. Chair.

40

41 CHAIRMAN BROWER: Yes.

42

43 MS. HEPA: Gordon, those words and the
44 way that it's referenced in this document, is that is
45 the existing language, the prohibition of all of those
46 listed. So with the Board-generated proposal it
47 wouldn't say that we're going to allow those. What
48 we're hoping will come out of it is something to say
49 that the use of a snowmachine to pursue or to what not
50 and those types of discussions will happen at the

1 statewide Board of Game meeting. Right?

2

3 MR. CARROLL: That's correct, yeah.

4

5 CHAIRMAN BROWER: Thank you, Taqulik
6 and Geoff for sharing that. I think we'll get
7 something in a written format so we could share it with
8 our Council members when it gets generated and approved
9 for dissemination and work as a Council to support an
10 action by the local advisory committee in that sense.
11 Thank you again.

12

13 MR. G. BROWER: I've got one question
14 before Mr. Carroll takes off.

15

16 CHAIRMAN BROWER: Gordon.

17

18 MR. G. BROWER: I still see this big
19 straight line and I really don't like that line that's
20 west of 156 and I know maybe it's because maybe the
21 upper Ikpikpuk area had some moose in there that were
22 habitating year round maybe in the Valley of the
23 Willows area and to see if that evolves into a -- you
24 know, it's like a natural little sanctuary anyway.
25 There's other rivers here going to the west that might
26 have the same kind of habitats and stuff. I just want
27 to be able to -- I think that extending the moose
28 season is good, but availability of those resources too
29 is -- jumping over a line is -- the intent is maybe to
30 protect the upper Ikpikpuk way up there. Maybe that s
31 the intent of west 156 and the occasional stray that
32 comes down to the lower part. Being able to harvest
33 that moose is a big issue. I don't know all the
34 history behind that, but you ought to take that line
35 out of there or move it.

36

37 CHAIRMAN BROWER: Go ahead, Geoff.

38

39 MR. CARROLL: Well, the reason that 156
40 line was originally chosen is exactly what you're
41 saying is because there is a very small but somewhat
42 persistent moose population on the Upper Ikpikpuk and
43 we're trying to -- you know, if we don't put anymore
44 pressure on it, it can slowly build up to the point
45 where we have kind of a more huntable population number
46 up there. But it's real low numbers. You know, it's
47 like there's maybe eight moose up there. Even taking
48 one or two cows out of that is going to have a -- you
49 know, maybe make that impossible for that small group
50 of moose to ever grow and that's the reason that it was

1 put there and that's kind of the reason we've been
2 sticking with it.

3
4 Population-wise it's no big deal either
5 way. Even if we wipe out the whole Ikpikpuk moose
6 population, you know, it's a pretty small number of
7 moose compared to the whole Colville population, but
8 it's just the idea. I mean we'd like to see that
9 little population persist and grow to where it will be
10 able to provide more moose for more people to hunt in
11 future years.

12
13 MR. G. BROWER: I think those are good
14 ideas. I still see that almost in comparison to what
15 is going on around Barter Island and conserving a very
16 small number and looking at allocation, things that
17 were talked about earlier. Those are just my concerns.
18 I don't want to argue. I just don't like the line. I
19 think we should be able to harvest a moose. If they
20 were going to go extinct, we wouldn't do it. Nature
21 would do it by itself probably in that area.

22
23 It's very hard to get up that far. I
24 just want the one that escapes from there maybe because
25 it finally grew plenty enough that they don't want to
26 all stay bunched up in there anymore that they start to
27 come down that river a little bit, which they do once
28 in a while. We ought to take that line off. It's not
29 a good line.

30
31 CHAIRMAN BROWER: Thank you, Gordon,
32 Geoff, Taqulik. Again, there's always time for more
33 discussion. It's not going away. It's there. We'll
34 see how this one works and see if there needs to be
35 another change. We'll definitely work with the Council
36 and include that at some other point in time for
37 another change. Again, thank you.

38
39 Dr. Yokel, is he up? Is he awake?

40
41 DR. YOKEL: Yes.

42
43 CHAIRMAN BROWER: I'm glad you're up
44 because it's going to be hard for me to stand up from
45 sitting here so long.

46
47 (Laughter)

48
49 CHAIRMAN BROWER: So, Dr. Yokel, you
50 have the floor.

1 DR. YOKEL: Thank you, Mr. Chairman.
2 As soon as Eva gets her password on the computer, I can
3 start my little presentation. Most of the information
4 that I brought is stuff that you've requested of me
5 through Eva. However, if you think I'm spending too
6 much time on it, just holler at me and I'll speed up,
7 okay.

8
9 Again, for the record, my name is Dave
10 Yokel. I work for the Bureau of Land Management's
11 Arctic Field Office in Fairbanks and we manage the
12 National Petroleum Reserve in Alaska among some other
13 small parcels on the North Slope.

14
15 At the last couple meetings of yours I
16 spoke about the results of our most recent land use
17 plan and I said I didn't know yet what affect this was
18 going to have on industry interest in NPR-A because we
19 had not had a subsequent lease sale yet, but now we
20 have. Here's the results of our last lease sale, which
21 was November 6th, 2013 and there was not much industry
22 interest.

23
24 In this picture, in case you don't
25 recognize the colors, all the blue tracts were the ones
26 we offered for sale and the magenta ones were ones that
27 were sold in previous years. The other three colors,
28 the green, a red one and the yellow, were sold. They
29 were offered also last November and they were sold. So
30 those were the only tracts that were sold out of this
31 lease sale. It was a total of 22 tracts and it only
32 brought in \$2.9 million. Relative to other lease
33 sales, that's a low amount of interest.

34
35 Now this area inside this parameter
36 here is a unitization of several existing lease tracts
37 purchased by ConocoPhillips and its predecessors. They
38 call it the Greater Moose's Tooth Unit. We are
39 currently developing an environmental impact statement
40 to build a road and a drill pad. This section right
41 here. Now there's a lot in this.

42
43 Here's the village of Nuiqsut. Here's
44 an existing pipeline to CD-4. Here's a new road being
45 built by ConocoPhillips right now out to CD-5, a new
46 drill pad that's on Kuukpik lands. Here's a new road
47 being built right now by Kuukpik on their own lands in
48 their hopes to increase some of their commercial
49 activity with ConocoPhillips.

50

1 The proposal by ConocoPhillips that
2 we're currently developing an EIS for is to build a
3 road from CD5 out here to a drill pad that would be
4 called GMT-1. Now this figure also shows a road out to
5 another drill pad called GMT-2 and that's not in the
6 current proposal, but it's expected that if
7 ConocoPhillips builds this much, they will go on out to
8 this because they've expressed that interest in the
9 past.

10
11 So we're currently -- we've written a
12 draft EIS. I think it's going to be released to the
13 public tomorrow. That's the latest schedule that I
14 heard. We're going to tour the North Slope to have
15 public comment meetings on this draft EIS in the second
16 and third week of March. So I'll be back up here
17 pretty soon.

18
19 In fact, this trip that you heard
20 mention of Pat Pourchot and Tom Beaudreaux, the
21 Assistant Secretary, that was supposed to happen
22 yesterday, the BLM's director from Washington, DC, Neil
23 Kornze, was also supposed to be on that trip. They
24 were going to Nuiqsut to talk to the people about this
25 potential development.

26
27 This is also stuff that's going on in
28 the same area right now. This represents
29 ConocoPhillips' current exploration and drilling plan
30 for this winter. So these blue lines are ice roads out
31 here and they plan to drill two exploration wells at
32 Flat Top #1 and Rendezvous #3. All these side roads are
33 ice roads out to lakes, which are water sources.
34 Here's Nuiqsut. Just for reference, here's CD-5 and
35 the potential locations of GMT-1 and GMT-2.

36
37 Eva said you were interested in other
38 ice roads, so of course every winter ConocoPhillips
39 builds an ice road out to Alpine, which has no
40 permanent roads to it. So there is this ice road
41 system in the NPR-A that's connected to an ice road
42 system outside of the NPR-A, which is connected to the
43 Spine Road in Prudhoe Bay and Kuparuk oil fields.
44 Please stop me at any time if you have any questions,
45 otherwise I'm going to keep cruising.
46 Now I feel weird because I've got my back to you.

47 CHAIRMAN BROWER: Just keep going, Dr.
48 Yokel. We have the mics. You can hear us definitely
49 with them.

50

1 DR. YOKEL: Okay. This is Umiat. Linc
2 Energy owns leases around Umiat and they originally
3 applied to drill three wells this winter and then they
4 reduced their expectations and said they were only
5 going to drill this 23-H up here in the hills. I'm not
6 sure how far they've progressed on that this winter.
7 They too have a trail coming over from the Dalton
8 Highway. You can see this red route here, which
9 represents a snow trail that they bring equipment out
10 across State lands from the Dalton Highway. So there's
11 an ice road and a snow trail coming towards NPR-A from
12 the east this winter.

13
14 This rather large block here, which is
15 about 3,700 square miles with Nuiqsut right here,
16 represents a proposal we have from SA Exploration for a
17 three-year seismic program wherein they would acquire 2
18 to 400 square miles of 3D seismic each of the next
19 three winters. They don't intend to do any in the NPR-
20 A this winter. So that's up to 1,200 square miles out
21 of this total, which is a little bit more than three
22 times that size.

23
24 This is what they call the public box
25 because their plans are confidential and we're not
26 allowed to release it to the public, but this is as
27 much as I can show you where they would potentially be
28 doing seismic over the next three years.

29
30 You wanted to hear some more about the
31 Central Yukon Resource Management Plan. This is BLM's
32 land use plan for BLM lands within the area surrounded
33 by red. Those lands that are actually BLM are only the
34 ones in yellow on the North Slope. That's very little.
35 There's some right around the Dalton Highway here up as
36 far north as Slope Mountain and a few scattered parcels
37 elsewhere.

38
39 I talked to you about this one last
40 August. Since then the only thing that's happened is
41 the scoping period, which is before we start writing
42 the EIS, has ended and they're analyzing those comments
43 now and the scope of report is not even ready yet, so
44 there's very little I can tell you about this plan
45 except that compared to the NPR-A plans that you're
46 pretty used to, this one is going to be on a rather
47 relaxed schedule. They're not in a big hurry.

48
49 They think the draft EIS will be made
50 available to the public sometime in 2015, so probably

1 over a year from now. The final EIS will be out
2 sometime in 2016. If you're interested in following
3 the progress, here's the URL for the website on this
4 plan.

5
6 Here are some more snow trails that are
7 being used in the NPR-A this winter. Peak, with the
8 Rologons, is going to be working on these trails this
9 winter. They're going to be running from two to six
10 Rologons for each of their freight and fuel hauls along
11 these routes. Right now I've seen these guys in here
12 at Sam and Lee's the last two mornings getting
13 breakfast before they drive down to Atqasuk and back,
14 so that's where they're working right now anyway.
15 These are Rologon snow trails. These are not ice
16 roads.

17
18 This very briefly is a listing of some
19 of the studies that the BLM will be involved in right
20 now or this summer. The first three are on the
21 Teshekpuk Herd. You're already aware of all of these
22 there in cooperation with either the North Slope
23 Borough or ADF&G or both. Some fish work, some
24 anthropological work with subsistence users. We're
25 cooperating with the USGS on work with the polar bears
26 in the Beaufort Sea and some various bird studies; snow
27 goose monitoring, monitoring raptors along the Colville
28 River and lake bluffs in the NPR-A.

29
30 Finally -- that was quick. There's a
31 line in your minutes from the last meeting in August
32 that said the Council requested information on hydrates
33 research in the NPR-A North Slope region. In fact,
34 that request did not come from the Council. It came
35 from the audience and I said at the time there was no
36 hydrates research going on in the NPR-A, but afterwards
37 I thought maybe he was asking about the coalbed natural
38 gas exploration going on in Wainwright. So I put
39 together a little information on that, but I'll just
40 skip it if you're not interested.

41
42 MR. G. BROWER: Mr. Chair.

43
44 CHAIRMAN BROWER: Gordon.

45
46 MR. G. BROWER: Yeah, I'm pretty much
47 interested in hearing this part.

48
49 DR. YOKEL: Okay. Well, it will take
50 two or three minutes anyway. So there's a cooperative

1 program between the Bureau of Land Management and U.S.
2 Geological Survey called the Alaska Rural Energy
3 program that studies the feasibility of using local
4 energy resources, such as coalbed natural gas, as
5 alternative energy sources for some of the more remote
6 Alaskan villages.

7
8 These two agencies cooperated with
9 State of Alaska, the North Slope Borough and ASRC to
10 test for coalbed natural gas at Wainwright beginning in
11 2007. Sometimes you hear it referred to as coalbed
12 methane, sometimes coalbed natural gas. It's mostly
13 methane and the results from Wainwright say it's about
14 99 percent methane, so they're pretty much one in the
15 same.

16
17 The reason it's not hydrates is because
18 -- it's the same gas, but it's attached to different
19 things. In hydrates, the gas is attached to water
20 molecules that appear in a frozen state in the
21 permafrost, whereas in coalbed natural gas the gas is
22 physically attached inside rock, that rock being coal.

23
24 So, anyway, this program, over the
25 course of four summers, drilled nine wells to discover,
26 delineate and test gas-bearing coal strata at
27 Wainwright. The drilling identified good potential in
28 a 7.6 foot thick bed of coal out of a depth -- this
29 stratum of coal ran at a depth between 1,160 and 1,310
30 feet depending on where the wells were because that
31 stratum dips at about 30 to 40 feet per mile.

32
33 The data obtained suggests that this
34 coalbed natural gas from this stratum has the potential
35 to provide a long-term source of energy to Wainwright.
36 However, gas production proved difficult due, first, to
37 well bore freezing in the permafrost layer, which goes
38 down about 1,000 feet. This was resolved by installing
39 two well bore heat traces, but they had a second
40 problem due to an unstable and sloughing layer of silt
41 stone, which introduced large amounts of extremely fine
42 silt into the production system and was clogging things
43 up. It significantly impeded the flow of both water
44 and gas from the coalbed.

45
46 To resolve this, the geologist
47 suggested that a new well should be drilled with casing
48 all the way down and into the top of the coalbed
49 stratum. That would prevent any of these other layers
50 up above from messing up the deal. However, I think at

1 this point the North Slope Borough would have been
2 funding any additional drilling and they rejected that
3 recommendation, so that project has been abandoned for
4 the time being.

5
6 And that's it.

7
8 CHAIRMAN BROWER: Thank you.

9
10 DR. YOKEL: Thank you.

11
12 CHAIRMAN BROWER: I'm almost falling
13 asleep. Thank you, Dave, for your presentation on the
14 BLM activities.

15
16 DR. YOKEL: You're welcome.

17
18 MS. PATTON: Vince is the very last.

19
20 CHAIRMAN BROWER: We have one more
21 presentation. Vincent. Vince. Why did I say Vincent?
22 It says quick Vince.

23
24 (Laughter)

25
26 MR. MATHEWS: Well, you guys talked
27 about spirits. I think my mother's spirit was here
28 because she always called me Vincent. I'll just hand
29 out the last report. Three things to cover. One is
30 I'm regearing the three Refuges I work for to target
31 their Refuge summary for this meeting since you don't
32 have a lot of action items. In the future, you'll have
33 to work your agenda so we can have a little bit more
34 time, but this is basically what you had in fall again.

35
36 The other item I wanted to bring up is
37 I'm more than willing to go to your school classes. I
38 used to be the person who trained new staff on ANILCA
39 and ANCSA. I was the one that developed the first
40 video for Senator Stevens, who demanded that new staff.
41 So I'm more than encouraged to help out with youth
42 understanding ANILCA and ANCSA. Last week I was in
43 classrooms of Fort Yukon on fisheries, so I'm more than
44 willing to do that with staff because I think that is
45 key on that.

46
47 Finally, you've already talked about
48 it, but Dr. Yokel and I are on the panels for
49 nominations. It would be good if we would get more
50 people applying. Not hundreds, but good

1 representatives so when we analyze those we can do
2 that. That pretty much starts from your end of the
3 table. I mean you know through your contacts who and
4 what village or Barrow that might be a good person to
5 serve on this Council. So I highly encourage you to
6 get the word out that it is important. I applaud you
7 to say -- I think it was Gordon or James saying to
8 encourage youth to be more involved. That is your
9 future.

10

11 If you look around the room since it's
12 late, most of us have gray hair. That generally means
13 that we're some of those old bulls that we're talking
14 about. The biologist was saying we kind of disappear.
15 I'm joking, but, seriously, all the Councils I go to,
16 all the Advisory Committees I go to, there's a lot of
17 gray hair. So there needs to be some black hair, red
18 hair and yellow hair on these groups because they're
19 going to carry the future.

20

21 With that, I'll just give this to Eva
22 and she can pass it around again. If there's any
23 questions, I can answer it at this time.

24

25 CHAIRMAN BROWER: Thank you, Vincent.
26 Here I go again. Vince.

27

28 MR. MATHEWS: Just don't call me
29 Vinnie. That's where the line is drawn.

30

31 (Laughter)

32

33 CHAIRMAN BROWER: Okay. I'm within
34 your parameters then. Again, thank you for taking your
35 time to provide this information. I'll definitely
36 review it. I think your recommendation about getting
37 more time on the agenda, maybe we need to restructure
38 the agenda where we're not holding our agencies at the
39 bottom of our agenda. Maybe they need to be up in the
40 front where we can get them to provide -- not just Fish
41 and Wildlife Service, but all of them -- get them to
42 provide the information so it could help steer some
43 decisions to be made in the meeting.

44

45 MR. MATHEWS: Another suggestion,
46 because I used to be a coordinator, is -- another
47 suggestion would be that you'd have a focus for this
48 meeting since this meeting is a little bit less action
49 items, so it might be -- this is a wild idea. The one
50 meeting might be caribou, the next time around might be

1 some other species and then the agencies then would
2 focus and build a thing there. There's some
3 limitations with that, but that is one.

4
5 Most of the agencies here, they're not
6 afraid to get up to this mic. I applaud you to think
7 about moving the agency reports, but don't think
8 they're waiting to jump in on an issue that you need
9 more information on. I'm pretty sure they would get up
10 to the mic. If they aren't, then I would encourage
11 them to get up to the mic, but I don't think that's the
12 case, but it is something to think about. You guys
13 have put in very long hours here.

14
15 Lastly, I want to thank you for your
16 discussions on passion and spirits. We had a fairly
17 good discussion during lunch about that. I think that
18 is key to Staff to hear those, to understand, because
19 at least they'll get the idea of passion as well as
20 traditional ecological knowledge. That is needed
21 because when the Board has to make a decision,
22 sometimes it is that additional understanding of
23 passion that may sway the Board.

24
25 That's all. Thank you.

26
27 CHAIRMAN BROWER: Thank you for sharing
28 that. Gordon, do you have any closing comments in
29 regards to what you've heard.

30
31 MR. G. BROWER: Mr. Chair. I'd just
32 like to thank everybody, all the agencies that
33 participated. Sometimes I feel like I was almost
34 starting to rant a little bit. In any event, I do my
35 best for the communities up here in the Arctic and I
36 want everybody to succeed, to have food on the table,
37 to have done things on the side of the law and where we
38 can compromise and work together for the betterment of
39 things around here. Thank you.

40
41 CHAIRMAN BROWER: Thank you, Gordon.
42 So I think it's right to close the meeting at this
43 time. I'm not sure if Rosemary is on, but thank you
44 for.....

45
46 MS. AHTUANGARUAK: Yeah, I'm on. I
47 just want to thank everyone too.

48
49 CHAIRMAN BROWER: I was just trying to
50 say thank you all for taking the time to be with us

1 over the teleconference. I know you're the invisible
2 ones and I keep forgetting that we have other
3 participants as well. So Rosemary and the others,
4 thank you.

5
6 MS. AHTUANGARUAK: I really want to
7 thank everyone for really participating in this. We
8 did get pushed for time, but it is something that
9 happens with all of our meetings. It is a lot of
10 information that we'll putting together and presenting.
11 There's layers of thoughts that need to go into this
12 process, especially with some of the last couple items
13 that we had discussions on. It's just so very
14 important that we do things in a good way. That we
15 work as best we can to help us continue to be
16 traditional and cultural uses in our lands and to help
17 us to follow the changes that are coming. Education
18 and communication are going to be key and it has to be
19 done and mark the ways and mark the layers. We really
20 have to grow the next process in a strong way to better
21 prepare them for depth of what we've dealt with and
22 what we're going to be doing with the changes that
23 others are projecting.

24
25 Thank you.

26
27 CHAIRMAN BROWER: Thank you, Rosemary.
28 At this time we'll adjourn the meeting and thank
29 everybody again.

30
31 MS. PATTON: Thank you, Gordon and
32 Harry, for your wisdom and time. There's just one
33 follow-up thing. We'll email everyone about meeting
34 dates since we're missing so many of our Council
35 members and we're still waiting on new ones. Right now
36 for August 19, 20 and 21st and the Council had made
37 some recommendations for the communities to meet in.
38 So I'll email everyone so we can get feedback and what
39 dates work best for the whole Council.

40
41 There are fisheries proposals. The
42 Council didn't have any, but if the public has any
43 fisheries proposals, Staff at OSM are available for
44 that if you get any inquiries.

45
46 Thank you.

47
48 (Off record)

49
50 (END OFF PROCEEDINGS)

C E R T I F I C A T E

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) ss.
STATE OF ALASKA)

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March 2014.

Salena A. Hile
Notary Public, State of Alaska
My Commission Expires: 9/16/14